



# **STIC Search Report**

## **Biotech-Chem Library**

STIC Database Tracking Number: 134481

TO: Zohreh Fay  
Location: 3a61 / 3c70  
Wednesday, October 13, 2004  
Art Unit: 1614  
Phone: 272-0573  
Serial Number: 10 / 644870

From: Jan Delaval  
Location: Biotech-Chem Library  
Rem 1A51  
Phone: 272-2504

[jan.delaval@uspto.gov](mailto:jan.delaval@uspto.gov)

### Search Notes

Access DB#

134481

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Zeheh Fay Examiner #: 66646 Date: 10/5/04  
Art Unit: 1614 Phone Number: 3052122053 Serial Number: 101644, 870  
Mail Box and Bldg Room Location: 3C70 Results Format Preferred (circle): PAPER DISK EMAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Eye drop CompositionInventors (please provide full names): Ueno, RyujiEarliest Priority Filing Date: 8/21/02

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

please search the composition  
and method of use.

## STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>Jan</u>	NA Sequence (#)	STN <input checked="" type="checkbox"/>
Searcher Phone #: <u>22504</u>	AA Sequence (#)	Dialog
Searcher Location	Structure (#) <input checked="" type="checkbox"/>	Questel/Orbit
Date Searcher Picked Up: <u>10/13</u>	Bibliographic	Dr. Link
Date Completed: <u>10/13</u>	Litigation	Lexis/Nexis
Searcher Prep & Review Time	Fulltext	Sequence Systems
Technical Prep Time: <u>15</u>	Patent Family	WWW/Internet
Online Fee: <u>4.70</u>	Other	Other (specify)

=> fil reg

FILE 'REGISTRY' ENTERED AT 10:32:37 ON 13 OCT 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 OCT 2004 HIGHEST RN 760932-70-5

DICTIONARY FILE UPDATES: 11 OCT 2004 HIGHEST RN 760932-70-5

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

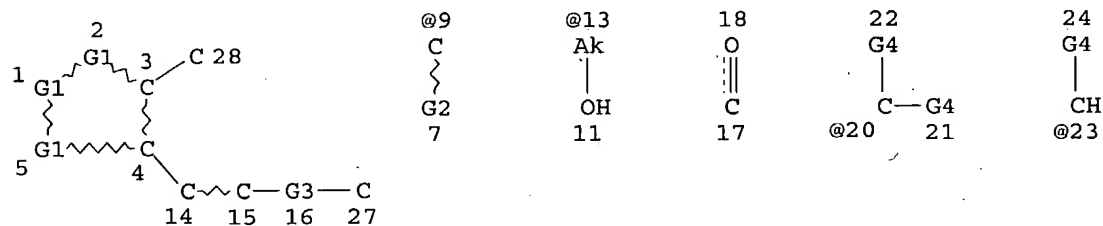
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d sta.que l9

L6 STR



26  
Ak  
|  
O  
@25

VAR G1=C/9

VAR G2=O/X/AK/13

VAR G3=C/23/20

VAR G4=OH/X/AK/25/13

NODE ATTRIBUTES:

NSPEC IS RC AT 27

CONNECT IS M1 RC AT 27

CONNECT IS M1 RC AT 28

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 1

NUMBER OF NODES IS 23

STEREO ATTRIBUTES: NONE

L9 34244 SEA FILE=REGISTRY SSS FUL L6

100.0% PROCESSED 388231 ITERATIONS

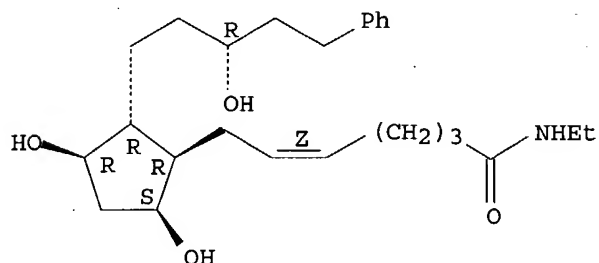
34244 ANSWERS

SEARCH TIME: 00.00.11

=> d l12 ide can tot

L12 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 607351-44-0 REGISTRY  
 CN 5-Heptenamide, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-N-ethyl-, (5Z)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C25 H39 N O4  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL  
 DT.CA Caplus document type: Patent  
 RL.P Roles from patents: BIOL (Biological study); USES (Uses)

Absolute stereochemistry.  
 Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

2 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

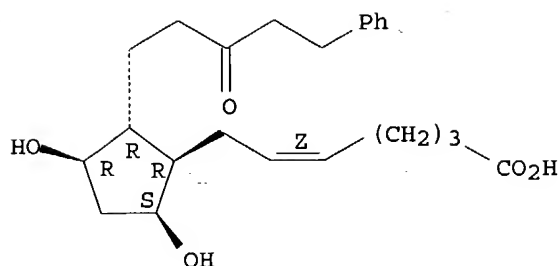
REFERENCE 1: 140:344877

REFERENCE 2: 139:296971

L12 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 369585-22-8 REGISTRY  
 CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxo-5-phenylpentyl)cyclopentyl]-, (5Z)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C23 H32 O5  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL  
 DT.CA Caplus document type: Patent  
 RL.P Roles from patents: BIOL (Biological study); USES (Uses)

Absolute stereochemistry.  
 Double bond geometry as shown.





\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

5 REFERENCES IN FILE CA (1907 TO DATE)  
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:212793

REFERENCE 2: 140:344877

REFERENCE 3: 136:299713

REFERENCE 4: 136:178021

REFERENCE 5: 135:327373

L12 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN

RN 163075-10-3 REGISTRY

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-4-[3-(trifluoromethyl)phenoxy]butyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 5-Heptenoic acid, 7-[3,5-dihydroxy-2-[3-hydroxy-4-[3-(trifluoromethyl)phenoxy]butyl]cyclopentyl]-, 1-methylethyl ester, [1R-[1α(Z),2β(R\*),3α,5α]]-

OTHER NAMES:

CN 13,14-Dihydrofluprostenol isopropyl ester

FS STEREOSEARCH

MF C26 H37 F3 O6

SR CA

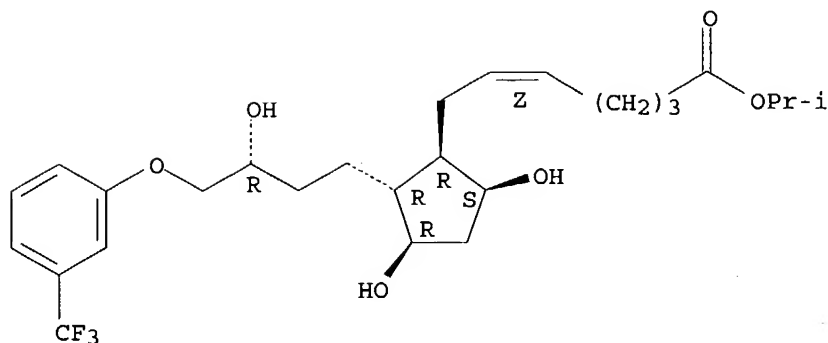
LC STN Files: CA, CAPLUS, CASREACT, USPAT2, USPATFULL

DT.CA Caplus document type: Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

Absolute stereochemistry.

Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4 REFERENCES IN FILE CA (1907 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:344877

REFERENCE 2: 138:368671

REFERENCE 3: 134:162867

REFERENCE 4: 122:290579

L12 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN

RN 130209-82-4 REGISTRY

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 5-Heptenoic acid, 7-[3,5-dihydroxy-2-(3-hydroxy-5-phenylpentyl)cyclopentyl]-, 1-methylethyl ester, [1R-[1 $\alpha$ (Z), 2 $\beta$ (R\*), 3 $\alpha$ , 5 $\alpha$ ]]-

OTHER NAMES:

CN 5: PN: WO03079997 PAGE: 17 claimed sequence

CN Latanoprost

CN PhXA 41

CN XA 41

CN Xalatan

FS STEREOSEARCH

DR 144489-49-6

MF C26 H40 O5

CI COM

SR CA

LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS, CIN, CSCHM, DDFU, DIOGENES, DRUGU, EMBASE, IMSCOSEARCH, IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MEDLINE, MRCK\*, PHAR, PROMT, PROUSDDR, PS, RTECS\*, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL

(\*File contains numerically searchable property data)

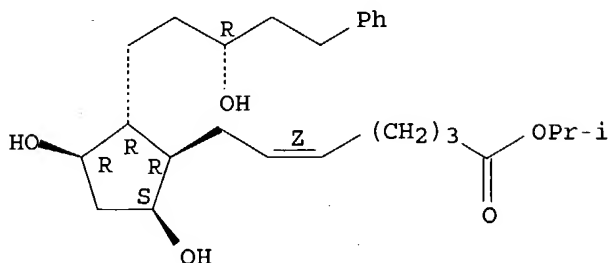
DT.CA Caplus document type: Conference; Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); MSC (Miscellaneous); PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses)

Absolute stereochemistry.  
Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

325 REFERENCES IN FILE CA (1907 TO DATE)  
5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
327 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:254451  
REFERENCE 2: 141:230312  
REFERENCE 3: 141:218906  
REFERENCE 4: 141:185135  
REFERENCE 5: 141:179214  
REFERENCE 6: 141:179203  
REFERENCE 7: 141:167661  
REFERENCE 8: 141:150902  
REFERENCE 9: 141:134031  
REFERENCE 10: 141:134030

L12 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN

RN 120373-36-6 REGISTRY

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, (5Z)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 5-Heptenoic acid, 7-[3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, [1R-[1 $\alpha$ (Z),2 $\beta$ ,3 $\alpha$ ,5 $\alpha$ ]]-

OTHER NAMES:

CN Unoprostone

FS STEREOSEARCH

MF C22 H38 O5

CI COM

SR CA

LC STN Files: ADISNEWS, BIOBUSINESS, BIOSIS, CA, CAPLUS, CHEMCATS, CIN, CSCHM, DIOGENES, IMSPATENTS, IMSRESEARCH, IPA, MRCK\*, PROMT, PROUSDDR, PS, TOXCENTER, USAN, USPATFULL  
(\*File contains numerically searchable property data)

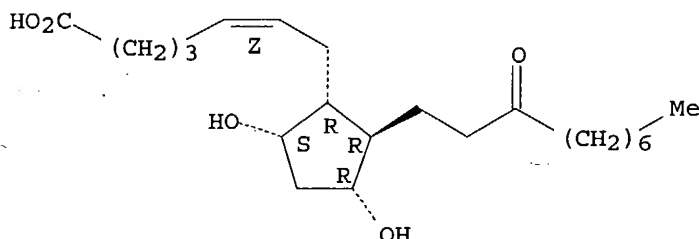
Other Sources: WHO

DT.CA Caplus document type: Journal; Patent

RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); RACT

(Reactant or reagent); USES (Uses)  
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)  
 RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); USES (Uses)  
 RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); USES (Uses)

Absolute stereochemistry.  
 Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

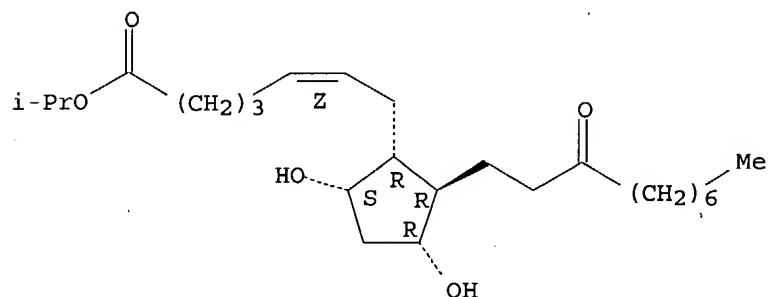
67 REFERENCES IN FILE CA (1907 TO DATE)  
 7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 67 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:185135  
 REFERENCE 2: 141:134031  
 REFERENCE 3: 141:17495  
 REFERENCE 4: 141:7107  
 REFERENCE 5: 140:417845  
 REFERENCE 6: 140:391155  
 REFERENCE 7: 140:391154  
 REFERENCE 8: 140:344877  
 REFERENCE 9: 140:280509  
 REFERENCE 10: 140:264877

L12 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 120373-24-2 REGISTRY  
 CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 5-Heptenoic acid, 7-[3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1-methylethyl ester, [1R-[1α(Z),2β,3α,5α]]-  
 OTHER NAMES:  
 CN 13,14-Dihydro-15-keto-20-ethyl-PGF2  
 CN Isopropyl unoprostone  
 CN Rescula  
 CN UF 021

CN Unoprostone isopropyl ester  
 FS STEREOSEARCH  
 MF C25 H44 O5  
 CI COM  
 SR CA  
 LC STN Files: ADISINSIGHT, ADISNEWS, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CAPLUS, CHEMCATS, CIN, CSChem, DIOGENES, EMBASE, IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MRCK\*, PHAR, PROMT, PROUSDDR, PS, RTECS\*, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 DT.CA Caplus document type: Journal; Patent  
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)  
 RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); USES (Uses)  
 RL.NP Roles from non-patents: BIOL (Biological study); PROC (Process); USES (Uses)

Absolute stereochemistry.  
 Double bond geometry as shown.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

121 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 121 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE	1:	141:117076
REFERENCE	2:	141:47249
REFERENCE	3:	141:7107
REFERENCE	4:	140:391155
REFERENCE	5:	140:391154
REFERENCE	6:	140:344877
REFERENCE	7:	140:264877
REFERENCE	8:	140:253553
REFERENCE	9:	140:228482
REFERENCE	10:	140:223330

=> d his

(FILE 'HOME' ENTERED AT 09:16:06 ON 13 OCT 2004)  
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 09:16:15 ON 13 OCT 2004

L1 1 S US20040076678/PN OR (US2003-644870# OR US2002-404779#)/AP, PRN  
E UENO R/AU  
L2 207 S E3, E23  
E SUCAMPO/PA, CS  
L3 23 S E3-E22  
SEL RN L1

FILE 'REGISTRY' ENTERED AT 09:18:56 ON 13 OCT 2004

L4 11 S E1-E11  
L5 6 S L4 AND C5/ES  
L6 STR  
L7 0 S L6 CSS  
L8 50 S L6 SAM  
L9 34244 S L6 FUL  
SAV TEMP L9 FAY644/A  
L10 STR L6  
L11 0 S L10 CSS SAM SUB=L9  
L12 6 S L4 AND L9  
L13 1 S 9002-89-5  
L14 1 S 56-81-5  
L15 1 S 9004-34-6  
L16 6694 S 9004-34-6/CRN  
L17 1391 S ?CELLULOS?/CNS NOT L16  
L18 806 S L17 NOT SQL/FA  
L19 2 S (ACRYLIC ACID OR METHACRYLIC ACID)/CN  
SEL RN  
L20 91653 S E12-E13/CRN  
L21 88521 S L20 AND (C4H6O2 OR C3H4O2)  
L22 21 S L21 AND 1/NC NOT IDS/CI  
L23 9 S L22 NOT HOMOPOLYMER  
L24 12 S L22 NOT L23  
L25 7 S L24 NOT (CYCLODEXTRIN OR N/ELS OR OC4/ES)  
L26 6 S L25 NOT C10H22O7  
L27 1 S 9005-65-6  
E SORBITAN  
L28 756 S E3  
L29 433 S L28 AND ETHANEDIYL  
L30 323 S L28 NOT L29  
L31 169 S L30 AND 1/NC  
L32 10 S L31 NOT (IDS/CI OR COMPD OR WITH)  
L33 1 S L32 AND OXYMETHYLENE  
L34 182 S L29 AND 1/NC NOT (IDS/CI OR COMPD OR WITH)  
E POLYSORBATE  
L35 21 S E3  
L36 9 S L35 AND 1/NC NOT (MXS/CI OR C6/ES OR NC4/ES)  
L37 33594 S L9 NOT ((MXS OR PMS OR IDS)/CI OR COMPD OR WITH OR UNSPECIFIE  
L38 33263 S L37 AND 1/NC  
L39 331 S L37 NOT L38  
L40 33257 S L38 NOT L12

FILE 'HCAPLUS' ENTERED AT 09:50:09 ON 13 OCT 2004

L41 419 S L12  
L42 418 S LATANOPROST OR PHXA41 OR PH() (XA41 OR XA 41) OR XA41 OR XA 41  
L43 39 S ISOPROPYLUNOPROSTONE OR ISOPROPYL UNOPROSTONE  
L44 409 S L39  
L45 49180 S L40  
E PROSTAGLANDIN/CT

L46 17 S E3  
 L47 39277 S E4,E5,E7,E10,E13,E16,E17,E28,E30,E31,E33,E36,E39  
 L48 31687 S E63  
 L49 5095 S E64-E67,E69,E70  
 E E63+ALL  
 L50 68728 S E4,E3+NT  
 L51 74694 S L41-L50  
 E ACRYLIC POLYMER/CT  
 E E3+ALL  
 L52 47858 S E2  
 E E2+ALL  
 L53 40 S L51 AND L52  
 L54 80 S L51 AND L19,L26  
 L55 77 S L51 AND L13  
 L56 167 S L51 AND L14  
 L57 104 S L51 AND L15  
 L58 227 S L51 AND L16  
 L59 201 S L51 AND L18  
 E POLYLACTAM/CT  
 E E4+ALL  
 L60 1 S L51 AND E2  
 E LACTAM/CT  
 L61 0 S L51 AND E32  
 L62 29 S L51 AND E22  
 L63 24 S L51 AND E23-E31,E34  
 L64 81 S L51 AND L27,L33,L34,L36  
 L65 41 S L64 AND L53-L60,L62,L63  
 L66 599 S L53-L64  
 L67 3 S L66 AND L1-L3  
 L68 23 S L66 AND VISCOSITY  
 L69 32 S L66 AND VISCO?  
 L70 32 S L68,L69  
 L71 1 S L67 AND L70  
 L72 81 S L66 AND L27,L33,L34,L36  
 L73 110 S L70,L72  
 E EYE/CW  
 L74 74378 S E3,E7,E9,E11,E12  
 L75 79161 S EYE+OLD,NT,PFT,RT/CT  
 L76 89281 S EYE, DISEASE+OLD,NT,PFT,RT/CT  
 E EYE+ALL/CT  
 L77 75310 S E8,E7+NT  
 L78 12626 S E26+OLD,NT  
 L79 1870 S E27+OLD,NT  
 L80 4225 S E28+OLD,NT  
 E E25+ALL  
 L81 32125 S E8,E9,E7+NT  
 L82 28 S L73 AND L74-L81  
 L83 30 S L73 AND (EYE? OR ?OCULAR? OR ?OPHTHALM?)  
 L84 41 S L67,L71,L82,L83  
 L85 69 S L73 NOT L84  
 SEL DN AN 31 39  
 L86 2 S E1-E6 AND L85  
 L87 12 S L84 AND EYE?/CW  
 L88 10 S L84 AND (EYE? OR OCULAR? OR OPHTHALM?)/TI  
 L89 1 S L84 AND OPHTHALM?/TI  
 L90 20 S L87-L89  
 L91 21 S L84 NOT L90  
 L92 2 S L91 AND GLAUCOM?  
 L93 19 S L91 NOT L92  
 L94 6 S L93 AND OPHTHALMIC  
 L95 30 S L86,L67,L71,L90,L92,L94  
 L96 13 S L84 NOT L95  
 L97 1 S L96 AND EYE NOT IRRITATION TEST

L98 31 S L95,L97  
L99 29 S L98 AND (PD<=20020821 OR PRD<=20020821 OR AD<=20020821)  
L100 2 S L98 NOT L99  
L101 31 S L98-L100  
SEL HIT RN

FILE 'REGISTRY' ENTERED AT 10:25:44 ON 13 OCT 2004

L102 55 S E7-E61  
L103 22 S L102 AND L9  
L104 33 S L102 NOT L103  
L105 28 S L104 AND L13-L16,L19,L26,L27,L33,L34,L36  
L106 5 S L104 NOT L105  
L107 21 S L103 NOT C20H38O2

FILE 'HCAPLUS' ENTERED AT 10:29:28 ON 13 OCT 2004

L108 38248 S L107  
L109 226 S L105 AND L108  
L110 19 S L101 AND L109  
L111 3 S L106 AND L101  
L112 1 S L111 AND VISCOUS OPHTHALMIC PHARMACEUTICAL  
L113 20 S L110,L112  
L114 11 S L101 NOT L111,L113  
L115 2 S L111 NOT L112  
L116 29 S L113,L114 NOT L115

FILE 'REGISTRY' ENTERED AT 10:32:37 ON 13 OCT 2004

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 10:32:54 ON 13 OCT 2004

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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FILE COVERS 1907 - 13 Oct 2004 VOL 141 ISS 16

FILE LAST UPDATED: 12 Oct 2004 (20041012/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d l116 all hitstr tot

L116 ANSWER 1 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 2004:354690 HCAPLUS  
DN 140:315111  
ED Entered STN: 30 Apr 2004  
TI Method using **latanoprost** for the treatment of ocular hypertension and glaucoma  
IN Ueno, Ryuji  
PA USA  
SO U.S. Pat. Appl. Publ., 4 pp.  
CODEN: USXXCO



DT Patent  
 LA English  
 IC ICM A61K031-557  
 ICS A61K031-5377  
 NCL 514573000; 514235800  
 CC 1-12 (Pharmacology)  
 Section cross-reference(s): 63

## FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	US 2004082660	A1	20040429	US 2003-429677	20030506	
	WO 2004037267	A1	20040506	WO 2003-JP13452	20031022	
	W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU		
	RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
PRAI	US 2002-420776P	P	20021024			
	US 2002-421044P	P	20021025			
	US 2003-429677	A	20030506			

## CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	US 2004082660	ICM	A61K031-557
		ICS	A61K031-5377
		NCL	514573000; 514235800
AB	A method is provided for treating <b>ocular</b> hypertension and glaucoma with reduced side effects such as keratoconjunctive disorders and macular edema, which comprises administering an <b>ophthalmic</b> composition comprising <b>latanoprost</b> as an active ingredient thereof to a subject in need of such treatment, wherein the <b>ophthalmic</b> composition contains substantially no benzalkonium chloride.		
ST	<b>latanoprost</b> ocular hypertension glaucoma treatment		
IT	Quaternary ammonium compounds, biological studies		
	RL: BSU (Biological study, unclassified); BIOL (Biological study) (alkylbenzyl dimethyl, chlorides; <b>latanoprost</b> for treatment of <b>ocular</b> hypertension and glaucoma)		
IT	<b>Eye, disease</b> (keratoconjunctive disorders; <b>latanoprost</b> for treatment of <b>ocular</b> hypertension and glaucoma)		
IT	Antiglaucoma agents		
	<b>Glaucoma (disease)</b> ( <b>latanoprost</b> for treatment of <b>ocular</b> hypertension and glaucoma)		
IT	<b>Eye, disease</b> (macular edema; <b>latanoprost</b> for treatment of <b>ocular</b> hypertension and glaucoma)		
IT	Drug delivery systems (ophthalmic; <b>latanoprost</b> for treatment of <b>ocular</b> hypertension and glaucoma)		
IT	Drug delivery systems (solns., <b>ophthalmic</b> ; <b>latanoprost</b> for treatment of <b>ocular</b> hypertension and glaucoma)		
IT	Drug delivery systems (unit doses; <b>latanoprost</b> for treatment of <b>ocular</b> hypertension and glaucoma)		
IT	60-00-4, EDTA, biological studies 9005-65-6, Polysorbate 80		

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (dissolving agent; **latanoprost** for treatment of  
**ocular hypertension and glaucoma**)

IT 26839-75-8, Timolol **130209-82-4, Latanoprost**  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (**latanoprost** for treatment of **ocular hypertension**  
 and glaucoma)

IT **9005-65-6**, Polysorbate 80  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (dissolving agent; **latanoprost** for treatment of  
**ocular hypertension and glaucoma**)

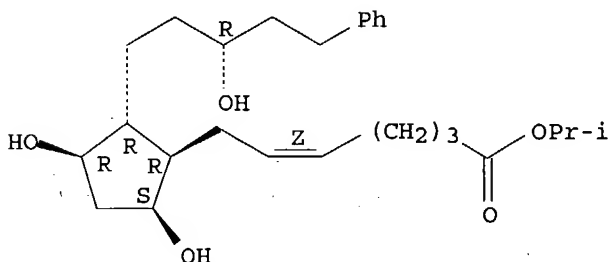
RN 9005-65-6 HCAPLUS  
 CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
 (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT **130209-82-4, Latanoprost**  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)  
 (**latanoprost** for treatment of **ocular hypertension**  
 and glaucoma)

RN 130209-82-4 HCAPLUS  
 CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-  
 phenylpentyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX  
 NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



L116 ANSWER 2 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:331585 HCAPLUS

DN 140:344877

ED Entered STN: 23 Apr 2004

TI **Ophthalmic solution comprising a prostaglandin compound and a  
 viscosity-increasing compound**

IN **Ueno, Ryuji**

PA **Sucampo Ag, USA**

SO U.S. Pat. Appl. Publ., 9 pp.

CODEN: USXXCO

DT Patent

LA English

IC ICM A61K031-557

ICS A61K009-14

NCL 424486000; 424488000; 514573000

CC 63-5 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004076678	A1	20040422	US 2003-644870	20030821 <--

PRAI US 2002-404779P P 20020821 &lt;--

## CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

US 2004076678 ICM A61K031-557  
 ICS A61K009-14  
 NCL 424486000; 424488000; 514573000

OS MARPAT 140:344877

AB The present invention relates to an **ophthalmic** solution comprising a prostaglandin compound and **viscosity**-increasing compd selected from the group consisting of acrylate polymers, polyvinyl alcs., glycerins, cellulose polymers and poly-lactams. The **ophthalmic** solution of the invention can provide elongated duration of the effect when administrated topically to the **eyes** of a patient.

ST ophthalmic soln prostaglandin **viscosity** increasing compdIT **Prostaglandins**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (20-Et, 13,14-dihydro,15-keto; ophthalmic solution comprising prostaglandin compound and **viscosity**-increasing compound)

IT **Acrylic polymers, biological studies****Prostaglandins**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (ophthalmic solution comprising prostaglandin compound and **viscosity**-increasing compound)

IT **Lactams**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (**polylactams**; ophthalmic solution comprising prostaglandin compound and **viscosity**-increasing compound)

IT Drug delivery systems

(solns., **ophthalmic**; ophthalmic solution comprising prostaglandin compound and **viscosity**-increasing compound)

IT 56-81-5, Glycerin, biological studies 9002-89-5

9004-34-6, Cellulose, biological studies 9005-63-4D,  
 fatty acyl derivs. 9005-65-6, Polysorbate 80 120373-24-2  
 120373-36-6 130209-82-4 163075-10-3  
 369585-22-8 607351-44-0

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (ophthalmic solution comprising prostaglandin compound and **viscosity**-increasing compound)

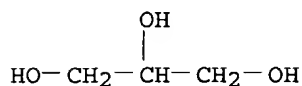
IT 56-81-5, Glycerin, biological studies 9002-89-5

9004-34-6, Cellulose, biological studies 9005-63-4D,  
 fatty acyl derivs. 9005-65-6, Polysorbate 80 120373-24-2  
 120373-36-6 130209-82-4 163075-10-3  
 369585-22-8 607351-44-0

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (ophthalmic solution comprising prostaglandin compound and **viscosity**-increasing compound)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



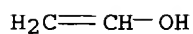
RN 9002-89-5 HCAPLUS

CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



RN 9004-34-6 HCAPLUS  
CN Cellulose (8CI, 9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 9005-63-4 HCAPLUS  
CN Sorbitan, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

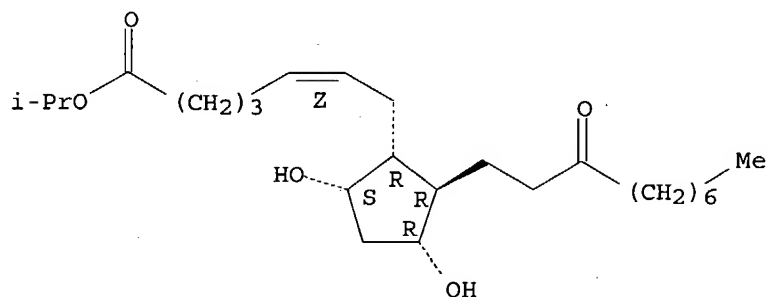
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 9005-65-6 HCAPLUS  
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
(9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

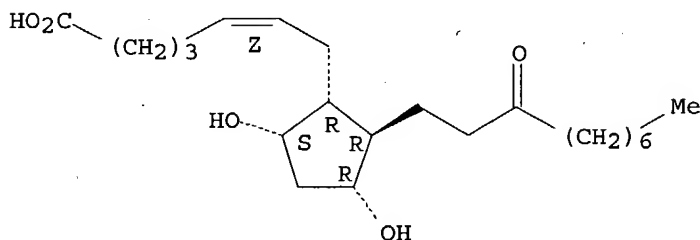
RN 120373-24-2 HCAPLUS  
CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



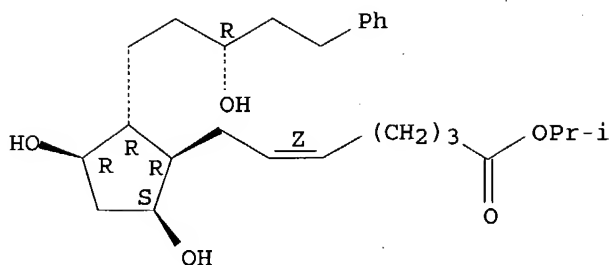
RN 120373-36-6 HCAPLUS  
CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



RN 130209-82-4 HCAPLUS  
CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

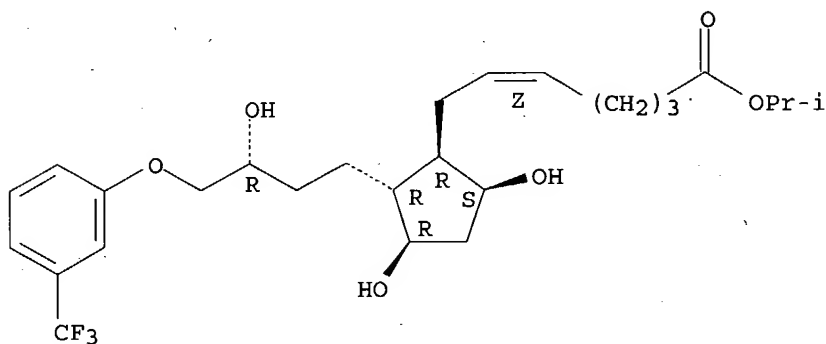
Absolute stereochemistry.  
Double bond geometry as shown.



RN 163075-10-3 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-4-[3-(trifluoromethyl)phenoxy]butyl]cyclopentyl]-, 1-methylethyl ester, (5Z)-(9CI) (CA INDEX NAME)

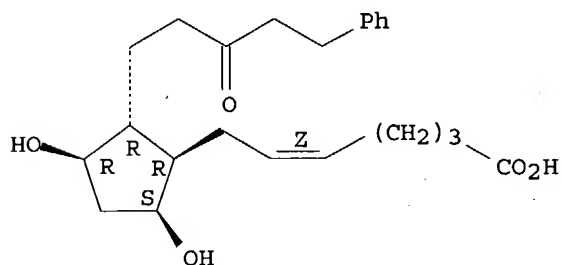
Absolute stereochemistry.  
Double bond geometry as shown.



RN 369585-22-8 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxo-5-phenylpentyl)cyclopentyl]-, (5Z)-(9CI) (CA INDEX NAME)

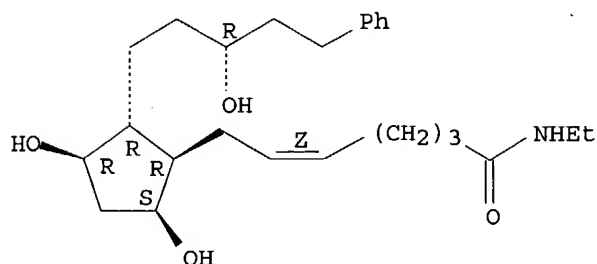
Absolute stereochemistry.  
Double bond geometry as shown.



RN 607351-44-0 HCAPLUS

CN 5-Heptenamide, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-N-ethyl-, (5Z)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L116 ANSWER 3 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:220208 HCAPLUS

DN 140:259120

ED Entered STN: 19 Mar 2004

TI Transparent eye drops containing latanoprost

IN Asada, Hiroyuki; Kimura, Akio

PA Santen Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM A61K031-5575

ICS A61K009-08; A61K047-18; A61K047-34; A61K047-10; A61K047-26;

A61P027-06

CC 63-6 (Pharmaceuticals)

FAN.CNT.1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004022063	A1	20040318	WO 2003-JP11402	20030908
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2004123729	A2	20040422	JP 2003-314865	20030908
PRAI	JP 2002-263030	A	20020909		
	JP 2002-263035	A	20020909		
	JP 2002-263039	A	20020909		

#### CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004022063	ICM	A61K031-5575
	ICS	A61K009-08; A61K047-18; A61K047-34; A61K047-10; A61K047-26; A61P027-06
JP 2004123729	FTERM	4C076/AA12; 4C076/BB24; 4C076/CC10; 4C076/DD07E; 4C076/DD22Z; 4C076/DD23D; 4C076/DD26Z; 4C076/DD30Z; 4C076/DD38D; 4C076/DD49R; 4C076/DD67D; 4C076/EE23D; 4C076/FF11; 4C076/FF14; 4C076/FF15; 4C076/FF36; 4C076/FF39; 4C086/AA01; 4C086/AA02; 4C086/DA02; 4C086/MA03; 4C086/MA05; 4C086/MA17; 4C086/MA58; 4C086/NA03; 4C086/NA14; 4C086/ZA33; 4C086/ZC42

AB It is intended to provide an improved formulation of **latanoprost** eye drops. Namely, transparent eye drops contain

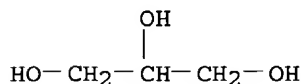
**latanoprost** as the active ingredient and benzalkonium chloride as a preservative, wherein clouding due to a composition change is prevented by using at least one means selected from the following means; (1) a means of adding a surfactant; (2) a means of using benzalkonium chloride represented by the formula  $[C_6H_5CH_2N(CH_3)_2R]Cl$  (wherein R represents C12 alkyl) as the benzalkonium chloride; and (3) a means of adding a nonionic isotonic agent as an isotonic agent. For example, an eye drop solution contained **latanoprost** 0.005,  $NaH_2PO_4$  0.2, NaCl 0.8, polysorbate-80 0.01, benzalkonium chloride 0.01, and distilled water balance to 100 g.

- ST **eyedrop latanoprost benzalkonium chloride polysorbate**  
 IT Quaternary ammonium compounds, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (alkylbenzyltrimethyl, chlorides; transparent eye drops containing **latanoprost**)
- IT Castor oil  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (ethoxylated; transparent eye drops containing **latanoprost**)
- IT Castor oil  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (hydrogenated, ethoxylated; transparent eye drops containing **latanoprost**)
- IT Drug delivery systems  
 (solns., ophthalmic; transparent eye drops containing **latanoprost**)
- IT Surfactants  
 (transparent eye drops containing **latanoprost**)
- IT Polyoxyalkylenes, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (transparent eye drops containing **latanoprost**)
- IT 56-81-5, Glycerin, biological studies 57-50-1, Sucrose, biological studies 57-55-6, Propylene glycol, biological studies 69-65-8, D-Mannitol 99-20-7, Trehalose 139-07-1, Dimethylbenzyldecylammonium chloride 9004-99-3, Polyethylene glycol monostearate 9005-65-6, Polysorbate 80 25322-68-3, Polyethylene glycol 130209-82-4, **Latanoprost**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (transparent eye drops containing **latanoprost**)

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE

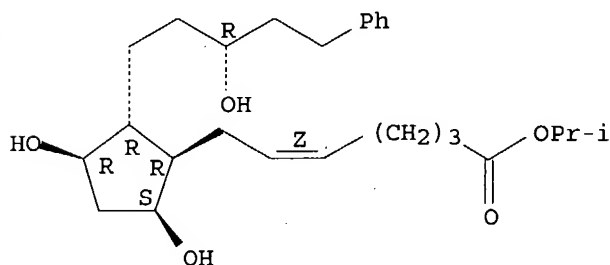
- (1) Alcon Laboratories Inc; CA 2112027 A 1994 HCAPLUS
  - (2) Alcon Laboratories Inc; US 5565492 A 1994 HCAPLUS
  - (3) Alcon Laboratories Inc; EP 603800 A1 1994 HCAPLUS
  - (4) Alcon Laboratories Inc; AU 9352450 A 1994 HCAPLUS
  - (5) Alcon Laboratories Inc; US 6166073 A 1997 HCAPLUS
  - (6) Alcon Laboratories Inc; AU 9676800 A 1997 HCAPLUS
  - (7) Alcon Laboratories Inc; WO 9723225 A1 1997 HCAPLUS
  - (8) Merk & Co Inc; US 20020094981 A1 1998
  - (9) Merk & Co Inc; JP 2002501533 A 1998
  - (10) Merk & Co Inc; WO 9853809 A1 1998 HCAPLUS
  - (11) Merk & Co Inc; AU 9876943 A 1998 HCAPLUS
  - (12) Merk & Co Inc; EP 998277 A1 1998 HCAPLUS
  - (13) Merk & Co Inc; WO 0004898 A1 2000 HCAPLUS
  - (14) Merk & Co Inc; EP 1109546 A1 2000 HCAPLUS
  - (15) Merk & Co Inc; JP 2002521332 A 2000
  - (16) Merk & Co Inc; AU 9950011 A 2000 HCAPLUS
  - (17) Sankyo Co Ltd; JP 62-277323 A 1987 HCAPLUS
  - (18) Santen Pharmaceutical Co Ltd; JP 46-26986 B 1971 HCAPLUS
  - (19) Santen Pharmaceutical Co Ltd; JP 01-246227 A 1989 HCAPLUS
  - (20) Santen Pharmaceutical Co Ltd; WO 03063879 A1 2003 HCAPLUS
  - (21) Santen Pharmaceutical Co Ltd; JP 2003292442 A 2003 HCAPLUS
- IT 56-81-5, Glycerin, biological studies 9005-65-6,

RN 56-81-5 HCAPLUS  
CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



RN	130209-82-4	HCAPLUS
CN	5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)	

Absolute stereochemistry.  
Double bond geometry as shown.



	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2004016720	A2	20040226	WO 2003-US25873	20030814 <--
	WO 2004016720	A3	20040408		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,				
	CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,				
	GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,				
	LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,				
	PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,				



TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,  
 CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,  
 NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
 GW, ML, MR, NE, SN, TD, TG

PRAI US 2002-403598P P 20020814 <--

## CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 2004016720 ICM C10M

AB A process for coating a polyunsatd. fatty acid (PUFA)-containing carrier particle or a PUFA matrix particle, or a liquid pharmaceutical-containing carrier particle or a liquid pharmaceutical matrix particle. Also disclosed are such particles made by the process of the invention and foods, pharmaceuticals, beverages, nutritional supplements, infant formula, pet food and animal feed which incorporate such particles. The oil-coated silica particles were coated to produce a barrier layer of solid gelatin. Such a solid coating on an oil materials is useful as a barrier to the undesirable effects of oxidation and it improves the handling characteristics of of the oil-coated particles.

ST coated polyunsatd fatty acid liq pharmaceutical

IT Hormone replacement therapy  
 (agents for; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Diagnosis  
 (agents; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Hormones, animal, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (anabolic steroids; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Thyroid gland  
 (antithyroid agents; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Heart, disease  
 (arrhythmia; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Skin preparations (pharmaceutical)  
 (astringents; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Drug delivery systems  
 (buccal; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Ion channel blockers  
 (calcium; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Glycosides  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (cardiac; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Adrenoceptor agonists  
 Adrenoceptor antagonists  
 Analgesics  
 Antacids  
 Anthelmintics  
 Anti-inflammatory agents  
 Antiarrhythmics  
 Antibiotics  
 Anticoagulants  
 Anticonvulsants  
 Antidepressants  
 Antidiabetic agents

Antidiarrheals  
Antiemetics  
Antihistamines  
Antihypertensives  
Antiobesity agents  
Antioxidants  
Antipsychotics  
Antitumor agents  
Antitussives  
Antiviral agents  
Anxiety  
Anxiolytics  
Asthma  
Beverages  
Binders  
Bitterness  
Bronchodilators  
Cholinergic agonists  
Cholinergic antagonists  
Coating materials  
Contraceptives  
Convulsion  
Cough  
Diabetes mellitus  
Diarrhea  
Diuresis  
Diuretics  
Dopamine agonists  
Dyes  
Electrolytes  
Epilepsy  
Feed  
Flavoring materials  
Food  
Fungicides  
Hemorrhage  
Hemostatics  
Human  
Hydrocolloids  
Hypertension  
Hypnotics and Sedatives  
Immunosuppressants  
Immunosuppression  
Inflammation  
Laxatives  
Lubricants  
Muscarinic antagonists  
Muscle relaxants  
Mycosis  
Neoplasm  
Nervous system stimulants  
Obesity  
Odor and Odorous substances  
Pain  
Protozoacides  
Psychostimulants  
Sleep  
Surfactants  
Thrombosis  
Thyroid gland, disease  
Vaccines  
Vasodilation  
Vasodilators

- Vomiting  
(coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT **Acrylic polymers, biological studies**  
Alditols  
Antibodies and Immunoglobulins  
Bile acids  
Carbohydrates, biological studies  
Corticosteroids, biological studies  
Disaccharides  
Enzymes, biological studies  
Lipids, biological studies  
Minerals, biological studies  
Monosaccharides  
Oligosaccharides, biological studies  
Peptides, biological studies  
Polymers, biological studies  
Polyoxyalkylenes, biological studies  
Polysaccharides, biological studies  
**Prostaglandins**  
Proteins  
Salts, biological studies  
Sex hormones  
Shellac  
Sulfonamides  
Vitamins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Intestine, disease  
(constipation; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Mental disorder  
(depression; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Waxes  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(emulsifying; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Polyesters, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(glycolide-based; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Milk substitutes  
(human; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Drug delivery systems  
(implants; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Sexual behavior  
(impotence, drugs for treatment of; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Animal virus  
Protozoa  
(infection with; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Drug delivery systems  
(inhalants; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)
- IT Polyesters, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(lactic acid-based; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT Polyesters, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(lactide; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Drug delivery systems  
(liqs.; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Drug delivery systems  
(nasal; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Drug delivery systems  
(ophthalmic; coated polyunsatd. fatty acid-containing particles  
for liquid pharmaceuticals)

IT Drug delivery systems  
(oral; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Drug delivery systems  
(parenterals; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Alcohols, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(polyhydric; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Fatty acids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(polyunsatd.; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Intestinal bacteria  
(probiotic; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Mental disorder  
(psychosis; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Drug delivery systems  
(rectal; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Proteins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(soybean; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Muscle, disease  
(spasm; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Muscle relaxants  
(spasmolytics; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Drug delivery systems  
(sublingual; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Diet  
(supplements; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Drug delivery systems  
(topical; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Drug delivery systems  
(transdermal; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Drug delivery systems  
(vaginal; coated polyunsatd. fatty acid-containing particles for liquid  
pharmaceuticals)

IT Adrenoceptor antagonists  
( $\beta$ -; coated polyunsatd. fatty acid-containing particles for liquid

pharmaceuticals)

IT 57-11-4, Stearic acid, biological studies 57-50-1, Sucrose, biological studies 63-42-3, Lactose 69-65-8, Mannitol 69-89-6D, Xanthine, derivs. 77-93-0, Triethyl citrate 79-41-4D, Methacrylic acid, esters, polymers 102-76-1, Triacetin 109-43-3, Dibutyl sebacate 151-21-3, Sodium lauryl sulfate, biological studies 471-34-1, Calcium carbonate, biological studies 506-26-3,  $\gamma$ -Linolenic acid 506-32-1, Arachidonic acid 557-04-0 577-11-7, Sodium docusate 1783-84-2, Dihomoy-Linolenic acid 4070-80-8, Sodium stearyl fumarate 7757-93-9, Dicalcium phosphate 9002-88-4, Polyethylene 9003-39-8, Polyvinylpyrrolidone 9004-34-6D, Cellulose, derivs. 9004-38-0, Cellulose acetate phthalate 9004-57-3, Ethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9005-25-8, Starch, biological studies 9005-65-6, Tween 80 9063-38-1, Sodium starch glycolate 13463-67-7, Titanium oxide, biological studies 14807-96-6, Talc, biological studies 25167-62-8, Docosahexaenoic acid 25322-68-3, Polyethylene glycol 25378-27-2, Eicosapentaenoic acid 26009-03-0, Polyglycolide 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)] 26100-51-6, Polylactic acid 26202-08-4, Polyglycolide 26680-10-4, Polylactide 74811-65-7, Croscarmellose sodium 105287-09-0, Aquateric 106392-12-5, Poloxamer

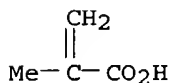
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT 7631-86-9, Fumed silica, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(colloidal; coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

IT 79-41-4D, Methacrylic acid, esters, polymers 9004-34-6D, Cellulose, derivs. 9004-38-0, Cellulose acetate phthalate 9004-57-3, Ethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9005-65-6, Tween 80  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(coated polyunsatd. fatty acid-containing particles for liquid pharmaceuticals)

RN 79-41-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl- (9CI) (CA INDEX NAME)



RN 9004-34-6 HCAPLUS

CN Cellulose (8CI, 9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 9004-38-0 HCAPLUS

CN Cellulose, acetate hydrogen 1,2-benzenedicarboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

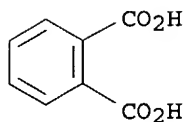
CMF Unspecified

CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

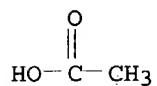
CM 2

CRN 88-99-3  
CMF C8 H6 O4



CM 3

CRN 64-19-7  
CMF C2 H4 O2



RN. 9004-57-3 HCAPLUS  
CN Cellulose, ethyl ether (8CI, 9CI) (CA INDEX NAME)

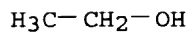
CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 64-17-5  
CMF C2 H6 O



RN 9004-64-2 HCAPLUS  
CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

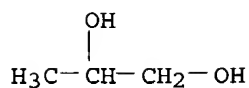
CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 57-55-6  
CMF C3 H8 O2



RN 9004-65-3 HCAPLUS  
CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

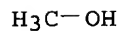
CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

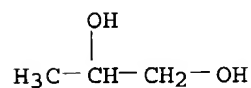
CM 2

CRN 67-56-1  
CMF C H4 O



CM 3

CRN 57-55-6  
CMF C3 H8 O2



RN 9004-67-5 HCAPLUS  
CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

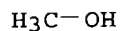
CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 67-56-1  
CMF C H4 O



RN 9005-65-6 HCAPLUS  
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
(9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L116 ANSWER 5 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2004:60341 HCAPLUS

DN 140:117406

ED Entered STN: 26 Jan 2004

TI Liquid dosage compositions of stable nanoparticulate drugs

IN Bosch, William H.; Hilborn, Matthew R.; Hovey, Douglas C.; Kline, Laura J.; Lee, Robert W.; Pruitt, John D.; Ryde, Niels P.; Ryde, Tuula A.; Xu, Shuqian

PA Elan Pharma International, Ltd, Ire.

SO PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K047-02

ICS A61K047-10; A61K047-26; A61K009-10; A61K009-14; A61K031-192;  
A61K031-58

CC 63-6 (Pharmaceuticals)

FAN.CNT 15

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004006959	A1	20040122	WO 2003-US22187	20030716 <--
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRAI	US 2002-396530P	P	20020716 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004006959	ICM	A61K047-02
	ICS	A61K047-10; A61K047-26; A61K009-10; A61K009-14; A61K031-192; A61K031-58

AB The present invention relates to liquid dosage compns. of stable nanoparticulate drugs. The liquid dosage compns. of the invention include osmotically active crystal growth inhibitors that stabilize the nanoparticulate active agents against crystal and particle size growth of the drug. Thus, an aqueous nanoparticulate colloidal dispersion (NCD) comprising drug 32.5 Copovidone 6.5, and dioctyl sodium sulfosuccinate 0.464% by weight was prepared by milling for 3.8 h under high energy milling conditions. The final mean particle size (by weight) of the drug particles was 161 nm. The concentrated NCD was then diluted with preserved water and glycerol (the osmotically active crystal growth inhibitor) to 0.5-3.0% drug.

ST liq dosage stable nanoparticulate drug

IT Intestine, disease

(Crohn's; liquid dosage compns. of stable nanoparticulate drugs)

IT Alcohols, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(C16-18, ethoxylated; liquid dosage compns. of stable nanoparticulate drugs)

IT Alcohols, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(C16-18; liquid dosage compns. of stable nanoparticulate drugs)

IT Arthritis

(Reiter's syndrome; liquid dosage compns. of stable nanoparticulate



drugs)

IT Drug delivery systems  
(aerosols; liquid dosage compns. of stable nanoparticulate drugs)

IT Diagnosis  
(agents; liquid dosage compns. of stable nanoparticulate drugs)

IT Polyoxyalkylenes, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(alkyl group-terminated; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(alkylbenzyltrimethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(alkyltrimethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(alkyltrimethyl, ethoxylated; liquid dosage compns. of stable nanoparticulate drugs)

IT Fats and Glyceridic oils, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(animal, marine; liquid dosage compns. of stable nanoparticulate drugs)

IT Spinal column, disease  
(ankylosing spondylitis; liquid dosage compns. of stable nanoparticulate drugs)

IT Polyethers, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aromatic, sulfonates; liquid dosage compns. of stable nanoparticulate drugs)

IT Heart, disease  
(arrhythmia; liquid dosage compns. of stable nanoparticulate drugs)

IT Skin preparations (pharmaceutical)  
(astringents; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(benzyl-C12-18-alkyldimethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(benzyl-C14-18-alkyldimethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(bioadhesive; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(buccal; liquid dosage compns. of stable nanoparticulate drugs)

IT Joint, anatomical  
(bursa, disease, bursitis; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(capsules; liquid dosage compns. of stable nanoparticulate drugs)

IT Lipids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(cationic; liquid dosage compns. of stable nanoparticulate drugs)

IT Uterus, neoplasm  
(cervix; liquid dosage compns. of stable nanoparticulate drugs)

IT Bronchi, disease  
(chronic bronchitis; liquid dosage compns. of stable nanoparticulate drugs)

IT Lung, disease  
(chronic obstructive; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(coco alkyl(hydroxyethyl)dimethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(coco alkylbis(hydroxyethyl)methyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(coco alkyltrimethyl, bromides; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(coco alkyltrimethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Fatty acids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(coco, esters with sucrose; liquid dosage compns. of stable nanoparticulate drugs)

IT Intestine, disease  
(colitis; liquid dosage compns. of stable nanoparticulate drugs)

IT Imaging agents  
(contrast; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(controlled-release; liquid dosage compns. of stable nanoparticulate drugs)

IT Mental disorder  
(depression; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(dialkyldimethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Tendon  
(disease, tendinitis; liquid dosage compns. of stable nanoparticulate drugs)

IT Uterus, disease  
(endometriosis; liquid dosage compns. of stable nanoparticulate drugs)

IT Uterus, neoplasm  
(endometrium; liquid dosage compns. of stable nanoparticulate drugs)

IT Fatty acids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(esters; liquid dosage compns. of stable nanoparticulate drugs)

IT Castor oil  
Phospholipids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(ethoxylated; liquid dosage compns. of stable nanoparticulate drugs)

IT Fats and Glyceridic oils, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(evening primrose; liquid dosage compns. of stable nanoparticulate drugs)

IT Fruit  
Vegetable  
(exts.; liquid dosage compns. of stable nanoparticulate drugs)

IT Heart, disease  
(failure; liquid dosage compns. of stable nanoparticulate drugs)

IT Intestine, neoplasm  
(familial polyposis; liquid dosage compns. of stable nanoparticulate drugs)

IT Muscle, disease  
(fibromyalgia; liquid dosage compns. of stable nanoparticulate drugs)

IT Stomach, disease  
(gastritis; liquid dosage compns. of stable nanoparticulate drugs)

IT Digestive tract, disease

(gastroenteritis; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(gels; liquid dosage compns. of stable nanoparticulate drugs)

IT Tea products  
(green; liquid dosage compns. of stable nanoparticulate drugs)

IT Carboxylic acids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(hydroxy; liquid dosage compns. of stable nanoparticulate drugs)

IT Animal virus  
Eubacteria  
Fungi  
(infection with; liquid dosage compns. of stable nanoparticulate drugs)

IT Lung, disease  
(infection; liquid dosage compns. of stable nanoparticulate drugs)

IT Intestine, disease  
(inflammatory; liquid dosage compns. of stable nanoparticulate drugs)

IT Crystal growth  
Thyroid gland  
(inhibitors; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(injections, i.p.; liquid dosage compns. of stable nanoparticulate drugs)

IT Rheumatoid arthritis  
(juvenile; liquid dosage compns. of stable nanoparticulate drugs)

IT AIDS (disease)  
Acne  
Adrenoceptor agonists  
Allergy  
Allergy inhibitors  
Aloe barbadensis  
Alzheimer's disease  
Analgesics  
Anorexia  
Anthelmintics  
Anti-AIDS agents  
Anti-Alzheimer's agents  
Anti-inflammatory agents  
Antiarrhythmics  
Antiarthritics  
Antiasthmatics  
Antibacterial agents  
Antibiotics  
Anticoagulants  
Anticonvulsants  
Antidepressants  
Antidiabetic agents  
Antiemetics  
Antihistamines  
Antihypertensives  
Antimigraine agents  
Antiobesity agents  
Antioxidants  
Antirheumatic agents  
Antitumor agents  
Antitussives  
Antiviral agents  
Anxiety  
Anxiolytics  
Arthritis  
Asthma  
Blood products  
Blood substitutes  
Cachexia  
Cardiovascular agents

Cardiovascular system, disease  
Castration  
Cholinergic agonists  
Commiphora mukul  
Cough  
Cystic fibrosis  
Diabetes mellitus  
Diuresis  
Diuretics  
Dopamine agonists  
Drug bioavailability  
Drug bioequivalence  
Dysmenorrhea  
Dyspepsia  
Emphysema  
Epilepsy  
Fish  
Food  
Food additives  
Food poisoning  
Fungicides  
Gout  
Hemorrhage  
Hemostatics  
Herb  
Hirsutism  
Hormone replacement therapy  
Human  
Hypertension  
Hypnotics and Sedatives  
Imaging agents  
Immunosuppressants  
Immunosuppression  
Inflammation  
Inotropics  
Kidney, disease  
Kidney, neoplasm  
Mammary gland, neoplasm  
Motion sickness  
Muscarinic antagonists  
Muscle contraction  
Muscle relaxants  
Neoplasm  
Obesity  
Osteoarthritis  
Osteoporosis  
Pain  
Parathyroid gland  
Particle size distribution  
Prostate gland, neoplasm  
Radiopharmaceuticals  
Respiratory distress syndrome  
Rheumatoid arthritis  
Shear  
Size reduction  
Sleep  
Solubility  
Stabilizing agents  
Storage  
Thrombosis  
Transplant and Transplantation  
Transplant rejection  
Uterus, neoplasm

Vasodilation

Vasodilators

**Viscosity**

Vomiting

(liquid dosage compns. of stable nanoparticulate drugs)

IT Glycols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Alditols

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Amine oxides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Amines, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Amino acids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Biopolymers

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Carbohydrates, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Caseins, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Corticosteroids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Disaccharides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Fatty acids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Flavonoids

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Gelatins, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Glycerophospholipids

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Minerals, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Monosaccharides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Peptides, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Phosphates, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Phosphatidylserines

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liquid dosage compns. of stable nanoparticulate drugs)

IT Phosphonium compounds  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(liquid dosage compns. of stable nanoparticulate drugs)

IT Polymers, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(liquid dosage compns. of stable nanoparticulate drugs)

IT Polyoxyalkylenes, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(liquid dosage compns. of stable nanoparticulate drugs)

IT Polyoxyalkylenes, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(liquid dosage compns. of stable nanoparticulate drugs)

IT Polysaccharides, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(liquid dosage compns. of stable nanoparticulate drugs)

IT **Prostaglandins**  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(liquid dosage compns. of stable nanoparticulate drugs)

IT Proteins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(liquid dosage compns. of stable nanoparticulate drugs)

IT Safflower oil  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(liquid dosage compns. of stable nanoparticulate drugs)

IT Salts, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(liquid dosage compns. of stable nanoparticulate drugs)

IT Sex hormones  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(liquid dosage compns. of stable nanoparticulate drugs)

IT Sulfonium compounds  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(liquid dosage compns. of stable nanoparticulate drugs)

IT Vitamins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(liqs.; liquid dosage compns. of stable nanoparticulate drugs)

IT Headache  
(migraine; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(nanoparticles; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(nasal; liquid dosage compns. of stable nanoparticulate drugs)

IT Anti-inflammatory agents  
(nonsteroidal; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(ointments, creams; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(ointments; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(ophthalmic; liquid dosage compns. of stable nanoparticulate drugs)

IT Contraceptives  
Drug delivery systems  
(oral; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(parenterals; liquid dosage compns. of stable nanoparticulate drugs)

IT Nerve, disease

(peripheral, injury; liquid dosage compns. of stable nanoparticulate drugs)

IT Polyoxyalkylenes, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(phenolic; liquid dosage compns. of stable nanoparticulate drugs)

IT Polyoxyalkylenes, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(phospholipid derivs.; liquid dosage compns. of stable nanoparticulate drugs)

IT Nutrients  
(plant; liquid dosage compns. of stable nanoparticulate drugs)

IT Phenolic resins, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(polyoxyalkylene-; liquid dosage compns. of stable nanoparticulate drugs)

IT Menopause  
(postmenopause; liquid dosage compns. of stable nanoparticulate drugs)

IT Intestinal bacteria  
(probiotic; liquid dosage compns. of stable nanoparticulate drugs)

IT Arthritis  
(psoriatic arthritis; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(pulmonary; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(rectal; liquid dosage compns. of stable nanoparticulate drugs)

IT Lipids, biological studies  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(regulating agents; liquid dosage compns. of stable nanoparticulate drugs)

IT Amines, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(salts; liquid dosage compns. of stable nanoparticulate drugs)

IT Connective tissue, disease  
(scleroderma; liquid dosage compns. of stable nanoparticulate drugs)

IT Linum usitatissimum  
(seeds; liquid dosage compns. of stable nanoparticulate drugs)

IT Diet  
(supplements; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(suspensions, oral; liquid dosage compns. of stable nanoparticulate drugs)

IT Lupus erythematosus  
(systemic; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(tablets; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(topical; liquid dosage compns. of stable nanoparticulate drugs)

IT Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(tri-C8-10-alkylmethyl, chlorides; liquid dosage compns. of stable nanoparticulate drugs)

IT Drug delivery systems  
(vaginal; liquid dosage compns. of stable nanoparticulate drugs)

IT Adrenoceptor antagonists  
( $\beta$ -; liquid dosage compns. of stable nanoparticulate drugs)

IT 13598-36-2D, Phosphonic acid, alkylidenebis- derivs.  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(Bisphosphonate; liquid dosage compns. of stable nanoparticulate drugs)

IT 7631-86-9, Silica, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(colloidal; liquid dosage compns. of stable nanoparticulate drugs)

IT 9004-06-2, Elastase 329900-75-6, COX-2  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (inhibitors; liquid dosage compns. of stable nanoparticulate drugs)

IT 110-54-3, Hexane, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
 (Uses)  
 (liquid dosage compns. of stable nanoparticulate drugs)

IT 50-35-1, Thalidomide 50-44-2, Mercaptopurine 50-53-3, Chlorpromazine,  
 biological studies 50-78-2, Acetylsalicylic acid 50-99-7, Glucose,  
 biological studies 52-53-9, Verapamil 56-81-5, Glycerol,  
 biological studies 56-85-9, Glutamine, biological studies 57-09-0,  
 Hexadecyltrimethylammonium bromide 57-11-4, Stearic acid, biological  
 studies 57-48-7, Fructose, biological studies 57-50-1, Sucrose,  
 biological studies 57-55-6, Propylene glycol, biological studies  
 57-88-5, Cholesterol, biological studies 58-32-2, Dipyrindamole  
 59-30-3, Folic acid, biological studies 62-49-7D, Choline, esters  
 63-42-3, Lactose 64-17-5, Ethanol, biological studies 67-45-8,  
 Furazolidone 69-65-8, Mannitol 69-89-6D, Xanthine, derivs. 73-31-4,  
 Melatonin 75-65-0, biological studies 80-74-0, Acetylsulfisoxazole  
 87-99-0, Xylitol 99-20-7, Trehalose 102-71-6, Triethanolamine,  
 biological studies 110-86-1D, Pyridine, quaternized, salts 112-00-5,  
 Lauryltrimethylammonium chloride 123-03-5, CPC 129-03-3,  
 Cyproheptadine 132-17-2, Benztropine mesylate 134-32-7D,  
 1-Naphthylamine, alkyldimethylammonium salts 139-07-1,  
 Lauryldimethylbenzylammonium chloride 140-72-7, Cetylpyridinium bromide  
 143-67-9, Vinblastine sulfate 148-79-8, Thiabendazole 151-21-3, SDS,  
 biological studies 154-42-7, Thioguanine 288-32-4D, Imidazole,  
 quaternized, salts 303-53-7, Cyclobenzaprine 396-01-0, Triamterene  
 500-92-5, Proguanil 502-65-8, Lycopene 645-05-6, Altretamine  
 846-50-4, Temazepam 1119-94-4, Dodecyltrimethylammonium bromide  
 1119-97-7, Tetradecyltrimethylammonium bromide 1200-22-2, Lipoic acid  
 1327-43-1, Magnesium aluminum silicate 1592-23-0, Calcium Stearate  
 1643-19-2, Tetrabutylammonium bromide 1951-25-3, Amiodarone 1977-10-2,  
 Loxapine 2062-78-4, Pimozide 2082-84-0, Decyltrimethylammonium bromide  
 2609-46-3, Amiloride 3416-24-8, Glucosamine 3458-28-4, Mannose  
 4205-90-7, Clonidine 4342-03-4, Dacarbazine 5137-55-3,  
 Methyltriethylammonium chloride 5350-41-4, Benzyltrimethylammonium  
 bromide 7173-51-5, Dimethyldidecylammonium chloride 7281-04-1,  
 Lauryldimethylbenzylammonium bromide 7447-40-7, Potassium chloride  
 (KCl), biological studies 7647-14-5, Sodium chloride, biological studies  
 7786-30-3, Magnesium chloride (MgCl<sub>2</sub>), biological studies 9000-01-5, Gum  
 acacia 9000-30-0D, Guar gum, cationic derivs. 9000-65-1, Tragacanth  
 gum 9001-63-2, Lysozyme 9002-89-5, Poly(vinyl alcohol)  
 9003-39-8, Polyvinylpyrrolidone 9004-32-4 9004-34-6,  
 Cellulose, biological studies 9004-54-0, Dextran, biological studies  
 9004-62-0, Hydroxyethyl cellulose 9004-64-2,  
 Hydroxypropyl cellulose 9004-65-3, Hypromellose  
 9004-67-5, Methyl cellulose 9004-99-3, Polyethylene glycol  
 stearate 9005-32-7, Alginate acid 9007-12-9, Calcitonin 9007-27-6,  
 Chondroitin 9011-14-7, Poly(methyl methacrylate) 9011-14-7D,  
 Poly(methyl methacrylate), hydrolyzed, trimethylammonium salts  
 9050-04-8, Cellulose, carboxymethyl ether, calcium salt  
 9050-31-1, Hydroxypropyl methyl cellulose phthalate 10118-90-8,  
 Minocycline 12441-09-7D, Sorbitan, esters 13292-46-1, Rifampin  
 16679-58-6, Desmopressin 18186-71-5, Dodecyltriethylammonium bromide  
 24280-93-1 25086-89-9, Vinyl acetate-1-vinyl-2-pyrrolidone copolymer  
 25301-02-4, Ethylene oxide-formaldehyde-4-(1,1,3,3-Tetramethylbutyl)phenol  
 copolymer 25322-68-3, Polyethylene glycol 25322-68-3D, Polyethylene  
 glycol, phospholipid derivs. 26062-79-3, Poly(diallyldimethylammonium  
 chloride) 27195-16-0, Sucrose distearate 27321-96-6, Polyethylene  
 glycol cholesteryl ether 28228-56-0 28679-24-5,  
 Dodecylbenzyltriethylammonium chloride 28981-97-7, Alprazolam  
 29094-61-9, Glipizide 29767-20-2, Teniposide 29836-26-8,



n-Octyl-β-D-glucopyranoside 31431-39-7, Mebendazole 31566-31-1,  
 Glyceryl monostearate 33419-42-0, Etoposide 34911-55-2, Bupropion  
 36735-22-5, Quazepam 37318-31-3, Sucrose stearate 38443-60-6,  
 Decyltriethylammonium chloride 39809-25-1, Penciclovir 42399-41-7,  
 Diltiazem 51264-14-3, Amsacrine 51569-39-2, Olin 10G 52128-35-5,  
 Trimetrexate 52467-63-7, Tricetylmethylammonium chloride 55008-57-6  
 55268-75-2, Cefuroxime 55348-40-8, Triton X-200 58846-77-8, n-Decyl  
 β-D-glucopyranoside 59080-45-4, n-Hexyl β-D-glucopyranoside  
 59122-55-3, n-DoDecyl β-D-glucopyranoside 59277-89-3, Acyclovir  
 65271-80-9, Mitoxantrone 65277-42-1, Ketoconazole 66085-59-4,  
 Nimodipine 69227-93-6, n-DoDecyl β-D-maltoside 69984-73-2,  
 n-Nonyl β-D-glucopyranoside 70458-96-7, Norfloxacin 72509-76-3,  
 Felodipine 72558-82-8, Ceftazidime 72559-06-9, Rifabutin 73590-58-6,  
 Omeprazole 76095-16-4, Enalapril maleate 76420-72-9, Enalaprilat  
 76824-35-6, Famotidine 78617-12-6, n-Heptyl β-D-glucopyranoside  
 79617-96-2, Sertraline 79794-75-5, Loratadine 81098-60-4, Cisapride  
 81103-11-9, Clarithromycin 81409-90-7, Cabergoline 81859-24-7,  
 Polyquat 10 82494-09-5, n-Decyl β-D-maltoside 84449-90-1,  
 Raloxifene 85261-19-4, Nonanoyl-N-methylglucamide 85261-20-7,  
 Decanoyl-N-methylglucamide 85316-98-9 85618-20-8, n-Heptyl  
 β-D-thioglucofuranoside 85618-21-9, n-Octyl-β-D-  
 thioglucofuranoside 85721-33-1, Ciprofloxacin 86386-73-4, Fluconazole  
 87679-37-6, Trandolapril 91161-71-6, Terbinafine 95233-18-4,  
 Atovaquone 97322-87-7, Troglitazone 100286-97-3, Milrinone lactate  
 101397-87-9, D-Glucitol, 1-deoxy-1-[methyl(1-oxoheptyl)amino]-  
 103577-45-3, Lansoprazole 104987-11-3, Tacrolimus 106266-06-2,  
 Risperidone 106392-12-5, Pluronic 107397-59-1, Tetronic 150R8  
 110617-70-4, Poloxamine 113665-84-2, Clopidogrel 115956-12-2,  
 Dolasetron 127666-00-6 127779-20-8, Saquinavir 132539-06-1,  
 Olanzapine 136817-59-9, Delavirdine 138402-11-6, Irbesartan  
 139481-59-7, Candesartan 139715-83-2, Sildenafil 144034-80-0,  
 Rizatriptan 145599-86-6, Cerivastatin 147059-72-1, Trovafloxacin  
 159989-65-8, Nelfinavir mesylate 283158-20-3 329326-68-3,  
 p-Isononylphenoxypolyglycidol 503178-50-5 608094-65-1, PEG-vitamin A  
 630400-66-7 630400-67-8 634601-99-3

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
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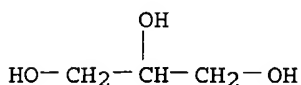
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE

- (1) Nanosystems Llc; WO 9624335 A 1996 HCAPLUS
  - (2) Rajagopalan, N; US 5298262 A 1994 HCAPLUS
  - (3) Ruddy, S; US 5585108 A 1996 HCAPLUS
  - (4) Sterling Winthrop Inc; EP 0601619 A 1994 HCAPLUS
- IT 56-81-5, Glycerol, biological studies 9002-89-5,  
 Poly(vinyl alcohol) 9004-32-4 9004-34-6, Cellulose,  
 biological studies 9004-62-0, Hydroxyethyl cellulose  
 9004-64-2, Hydroxypropyl cellulose 9004-65-3,  
 Hypromellose 9004-67-5, Methyl cellulose 9050-04-8,  
 Cellulose, carboxymethyl ether, calcium salt 9050-31-1,  
 Hydroxypropyl methyl cellulose phthalate 81859-24-7, Polyquat 10

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (liquid dosage compns. of stable nanoparticulate drugs)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



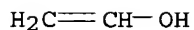
RN 9002-89-5 HCAPLUS

CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5

CMF C2 H4 O



RN 9004-32-4 HCAPLUS

CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

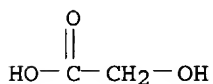
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 79-14-1

CMF C2 H4 O3



RN 9004-34-6 HCAPLUS

CN Cellulose (8CI, 9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 9004-62-0 HCAPLUS

CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

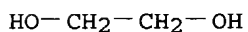
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 107-21-1

CMF C2 H6 O2



RN 9004-64-2 HCAPLUS

CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

CM 1

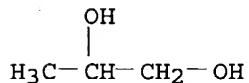
CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

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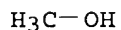
CRN 57-55-6  
CMF C3 H8 O2RN 9004-65-3 HCAPLUS  
CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

CM 1

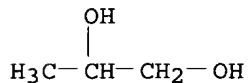
CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

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CM 2

CRN 67-56-1  
CMF C H4 O

CM 3

CRN 57-55-6  
CMF C3 H8 O2RN 9004-67-5 HCAPLUS  
CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

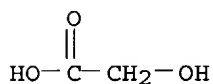
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CMF C H4 O

H<sub>3</sub>C-OH

RN 9050-04-8 HCAPLUS  
CN Cellulose, carboxymethyl ether, calcium salt (9CI) (CA INDEX NAME)  
CM 1  
CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

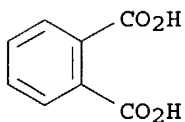
CM 2  
CRN 79-14-1  
CMF C2 H4 O3



RN 9050-31-1 HCAPLUS  
CN Cellulose, hydrogen 1,2-benzenedicarboxylate, 2-hydroxypropyl methyl ether  
(9CI) (CA INDEX NAME)  
CM 1  
CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2  
CRN 88-99-3  
CMF C8 H6 O4

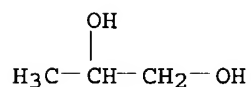


CM 3  
CRN 67-56-1  
CMF C H4 O

H<sub>3</sub>C-OH

CM 4

CRN 57-55-6  
CMF C3 H8 O2



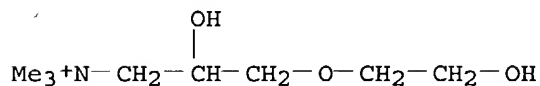
RN 81859-24-7 HCAPLUS  
CN Cellulose, 2-hydroxyethyl 2-[2-hydroxy-3-(trimethylammonio)propoxy]ethyl  
2-hydroxy-3-(trimethylammonio)propyl ether, chloride (9CI) (CA INDEX  
NAME)

CM 1

CRN 170553-71-6  
CMF C8 H20 N O3 . x C6 H16 N O2 . x C2 H6 O2 . x Unspecified

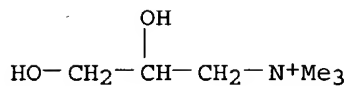
CM 2

CRN 170344-46-4  
CMF C8 H20 N O3



CM 3

CRN 44814-66-6  
CMF C6 H16 N O2



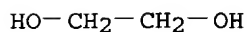
CM 4

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 5

CRN 107-21-1  
CMF C2 H6 O2



AN 2003:609847 HCAPLUS  
 DN 139:128062  
 ED Entered STN: 08 Aug 2003  
 TI Method of enhancing hair growth using cyclopentane heptanoic acid compounds  
 IN Woodward, David F.; Vandenburg, Amanda M.  
 PA Allergan, Inc., USA  
 SO U.S. Pat. Appl. Publ., 11 pp.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 IC ICM A61K031-557  
 ICS A61K031-558; A61K007-06  
 NCL 424070100; 514568000; 514430000; 514277000; 514449000  
 CC 1-12 (Pharmacology)  
 Section cross-reference(s): 63

FAN.CNT 1

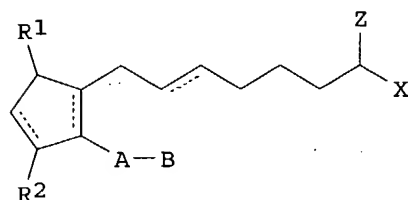
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003147823	A1	20030807	US 2003-345788	20030115 <--
	WO 2003066008	A1	20030814	WO 2003-US3363	20030203 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	US 2002-354425P	P	20020204 <--		
	US 2003-345788	A	20030115		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2003147823	ICM	A61K031-557
	ICS	A61K031-558; A61K007-06
	NCL	424070100; 514568000; 514430000; 514277000; 514449000

OS MARPAT 139:128062

GI

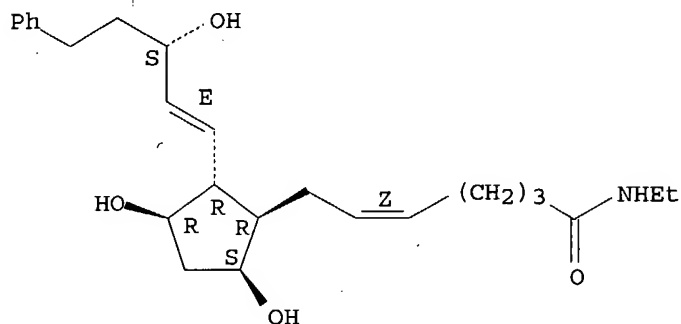


AB Methods and compns. for stimulating the growth of hair are disclosed wherein said compns. include a cyclopentane heptanoic acid, 2-cycloalkyl or arylalkyl compound I (dashed bonds represent single or double bond which can be in the cis or trans configuration; A = alkylene or alkenylene radical; B = cycloalkyl, aryl; Z = O; X = N(R4)2; R4 = H, lower alkyl, etc.; R1, R2 = O, OH, O(CO)R6; and R6 = C1-20 (un)saturated acyclic hydrocarbon, etc.). Such compns. are used in treating the skin or scalp

- of a human or non-human animal. Bimatoprost is preferred for this treatment. In a patient treated for glaucoma with bimatoprost, the **eyelashes** had increased growth.
- ST cyclopentane heptanoate compd enhancing hair growth; **eyelash** growth bimatoprost
- IT Drug delivery systems  
(aerosols; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Alopecia  
Animal  
Hair  
Human  
Mammalia  
Scalp  
Skin  
(cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Paraffin oils  
Petrolatum  
Wool wax  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT **Eye**  
(**eyelash**; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Hair  
(follicle; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Hair preparations  
(growth stimulants; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Drug delivery systems  
(lotions; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Drug delivery systems  
(ointments, creams; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Drug delivery systems  
(powders, topical, dusting; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Drug delivery systems  
(solns.; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Waxes  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(spermaceti; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT Drug delivery systems  
(topical; cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT 5763-58-6D, Cyclopentane heptanoic acid, cycloalkyl or arylalkyl compds. **155206-00-1**, Bimatoprost **155206-00-1D**, Bimatoprost, acid addition salts  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(cyclopentane heptanoic acid compds. for enhancing hair growth)
- IT 57-55-6, Propylene glycol, biological studies 64-17-5, Ethanol, biological studies 75-71-8, Dichlorodifluoromethane 99-76-3, Methylparaben 872-50-4, N-Methyl pyrrolidone, biological studies 1314-13-2, Zinc oxide, biological studies 1320-37-2, Dichlorotetrafluoroethane 7732-18-5, Water, biological studies 8011-96-9, Calamine 8049-07-8, Tegacid **9005-65-6**, Polysorbate 80 14807-96-6, Talc, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(cyclopentane heptanoic acid compds. for enhancing hair growth)

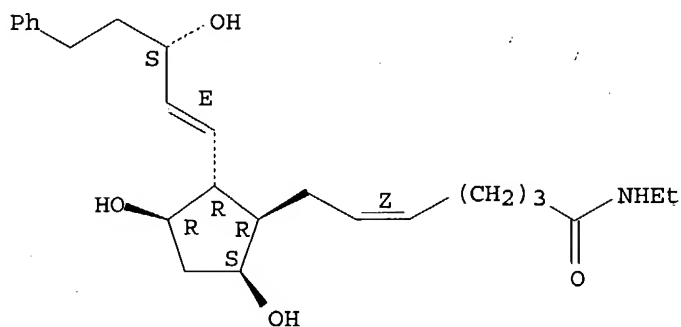
IT 155206-00-1, Bimatoprost 155206-00-1D, Bimatoprost, acid addition salts  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (cyclopentane heptanoic acid compds. for enhancing hair growth)  
 RN 155206-00-1 HCAPLUS  
 CN 5-Heptenamide, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E,3S)-3-hydroxy-5-phenyl-1-pentenyl]cyclopentyl]-N-ethyl-, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



RN 155206-00-1 HCAPLUS  
 CN 5-Heptenamide, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E,3S)-3-hydroxy-5-phenyl-1-pentenyl]cyclopentyl]-N-ethyl-, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



IT 9005-65-6, Polysorbate 80  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (cyclopentane heptanoic acid compds. for enhancing hair growth)  
 RN 9005-65-6 HCAPLUS  
 CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L116 ANSWER 7 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2003:491033 HCAPLUS  
 DN 139:47185  
 ED Entered STN: 27 Jun 2003  
 TI Aminoalkyl-benzofuran-5-ol compounds for the treatment of glaucoma  
 IN May, Jesse A.  
 PA Alcon, Inc., Switz.



SO PCT Int. Appl., 19 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K031-34  
 ICS C07D307-81; C07D307-82  
 CC 1-11 (Pharmacology)  
 Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003051352	A1	20030626	WO 2002-US38908	20021205 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR				
	EP 1461030	A1	20040929	EP 2002-784741	20021205 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
PRAI	US 2001-340361P	P	20011214	<--	
	WO 2002-US38908	W	20021205		

CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2003051352	ICM	A61K031-34
		ICS	C07D307-81; C07D307-82
AB	The present invention provides novel compns. containing the compds. of the invention in a pharmaceutically acceptable excipient and methods for using the compns. for lowering <b>intraocular</b> pressure.		
ST	aminoalkyl benzofuranol compd glaucoma <b>intraocular</b> pressure		
IT	Glutamate antagonists (NMDA antagonists; aminoalkyl benzofuranol compds. for treatment of glaucoma)		
IT	<b>Viscosity</b> (agents for; aminoalkyl benzofuranol compds. for treatment of glaucoma)		
IT	Antiglaucoma agents <b>Eye</b> Surfactants (aminoalkyl benzofuranol compds. for treatment of glaucoma)		
IT	<b>Prostaglandins</b> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (aminoalkyl benzofuranol compds. for treatment of glaucoma)		
IT	Ion channel blockers (calcium; aminoalkyl benzofuranol compds. for treatment of glaucoma)		
IT	Nervous system agents (miotics; aminoalkyl benzofuranol compds. for treatment of glaucoma)		
IT	Cytoprotective agents (neuroprotective; aminoalkyl benzofuranol compds. for treatment of glaucoma)		
IT	Drug delivery systems (solns., <b>ophthalmic</b> ; aminoalkyl benzofuranol compds. for treatment of glaucoma)		
IT	Drug delivery systems (suspensions, <b>ophthalmic</b> ; aminoalkyl benzofuranol compds. for treatment of glaucoma)		
IT	Adrenoceptor agonists ( $\alpha 2$ -; aminoalkyl benzofuranol compds. for treatment of glaucoma)		
IT	Adrenoceptor antagonists		

( $\beta$ -; aminoalkyl benzofuranol compds. for treatment of glaucoma)  
IT 9003-39-8, Polyvinylpyrrolidone 9004-62-0, Hydroxyethyl  
cellulose 9004-65-3, Hydroxypropyl methyl cellulose  
9004-67-5, Methyl cellulose 37353-59-6, Hydroxymethyl  
cellulose  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aminoalkyl benzofuranol compds. for treatment of glaucoma)  
IT 9001-03-0, Carbonic anhydrase  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors; aminoalkyl benzofuranol compds. for treatment of glaucoma)  
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE  
(1) Eli Lilly And Company; WO 0044737 A1 2000 HCAPLUS  
(2) Grinev; CAPLUS NO 1984:68106 1983  
(3) Ogawa; US 5539974 A1 1996  
IT 9004-62-0, Hydroxyethyl cellulose 9004-65-3,  
Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose  
37353-59-6, Hydroxymethyl cellulose  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aminoalkyl benzofuranol compds. for treatment of glaucoma)  
RN 9004-62-0 HCAPLUS  
CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 107-21-1  
CMF C2 H6 O2

HO-CH<sub>2</sub>-CH<sub>2</sub>-OH

RN 9004-65-3 HCAPLUS  
CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

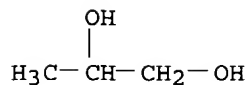
CM 2

CRN 67-56-1  
CMF C H4 O

H<sub>3</sub>C-OH

CM 3

CRN 57-55-6  
CMF C3 H8 O2



RN 9004-67-5 HCAPLUS  
CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

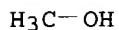
CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 67-56-1  
CMF C H4 O



RN 37353-59-6 HCAPLUS  
CN Cellulose, hydroxymethyl ether (9CI) (CA INDEX NAME)

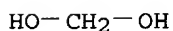
CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 463-57-0  
CMF C H4 O2



L116 ANSWER 8 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 2003:490986 HCAPLUS  
DN 139:63347  
ED Entered STN: 27 Jun 2003  
TI Substituted 5-hydroxyindole compounds for the treatment of  
glaucoma  
IN May, Jesse A.; Dantanarayana, Anura P.  
PA Alcon, Inc., Switz.; Namil, Abdelmoula; Sharif, Najam A.; Zinke, Paul W.;  
Dean, Thomas R.  
SO PCT Int. Appl., 20 pp.  
CODEN: PIXXD2  
DT Patent  
LA English

IC ICM A61K

CC 1-11 (Pharmacology)

Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003051291	A2	20030626	WO 2002-US38625	20021205 <--
	WO 2003051291	A3	20031023		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR				

PRAI US 2001-340445P P 20011214 &lt;--

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003051291	ICM A61K	

OS MARPAT 139:63347

AB The present invention provides novel compds. with 5-HT<sub>2</sub> agonist activity, compns. containing the compds. and methods of their use to lower **intraocular** pressure and/or provide neuroprotection. CNS activity of bufotenine fumarate was studied in mice.

ST hydroxyindole compd **glaucoma intraocular** pressure neuroprotection; bufotenine **glaucoma intraocular** pressure neuroprotection

IT 5-HT agonists  
(5-HT<sub>2A</sub>; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Glutamate antagonists  
(NMDA antagonists; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Mitosis  
(agents for; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Ion channel blockers  
(calcium; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Cytoprotective agents  
(neuroprotective; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Drug delivery systems  
(solns., **ophthalmic**; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Antiglaucoma agents  
Surfactants  
**Viscosity**  
(substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT **Prostaglandins**  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Drug delivery systems  
(suspensions, **ophthalmic**; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Adrenoceptor agonists  
( $\alpha$ <sub>2</sub>-; substituted 5-hydroxyindole compds. for treatment of **glaucoma**)

IT Adrenoceptor antagonists  
( $\beta$ -; substituted 5-hydroxyindole compds. for treatment of  
glaucoma)

IT 9001-03-0, Carbonic anhydrase  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors; substituted 5-hydroxyindole compds. for treatment of  
glaucoma)

IT 548797-06-4  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(substituted 5-hydroxyindole compds. for treatment of glaucoma  
)

IT 9003-39-8, Polyvinylpyrrolidone 9004-62-0, Hydroxyethyl  
cellulose 9004-65-3, Hydroxypropyl methyl cellulose  
9004-67-5, Methyl cellulose 37353-59-6, Hydroxymethyl  
cellulose  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(substituted 5-hydroxyindole compds. for treatment of glaucoma  
)

IT 9004-62-0, Hydroxyethyl cellulose 9004-65-3,  
Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose  
37353-59-6, Hydroxymethyl cellulose  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(substituted 5-hydroxyindole compds. for treatment of glaucoma  
)

RN 9004-62-0 HCAPLUS  
CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 107-21-1  
CMF C2 H6 O2

HO-CH<sub>2</sub>-CH<sub>2</sub>-OH

RN 9004-65-3 HCAPLUS  
CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

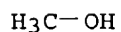
CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

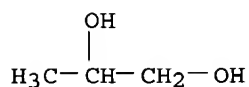
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 67-56-1  
CMF C H4 O



CM 3

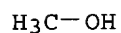
CRN 57-55-6  
CMF C3 H8 O2RN 9004-67-5 HCAPLUS  
CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 67-56-1  
CMF C H4 ORN 37353-59-6 HCAPLUS  
CN Cellulose, hydroxymethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 463-57-0  
CMF C H4 O2

L116 ANSWER 9 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 2002:754995 HCAPLUS  
DN 137:268473  
ED Entered STN: 04 Oct 2002  
TI Porous drug matrices and methods of manufacture thereof  
IN Straub, Julie; Altreuter, David; Bernstein, Howard; Chickering, Donald E.;

PA Khattak, Sarwat; Randall, Greg  
 SO Acusphere Inc., USA  
 U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U. S. 6,395,300.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 IC ICM A61K009-14  
 ICS A61K009-50  
 NCL 424499000  
 CC 63-6 (Pharmaceuticals)  
 FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002142050	A1	20021003	US 2002-53929	20020122 <--
	US 6395300	B1	20020528	US 1999-433486	19991104 <--
	US 6645528	B1	20031111	US 2000-694407	20001023 <--
	ZA 2001010347	A	20030730	ZA 2001-10347	20011218 <--
PRAI	US 1999-136323P	P	19990527	<--	
	US 1999-158659P	P	19991008	<--	
	US 1999-433486	A2	19991104	<--	

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2002142050	ICM	A61K009-14
	ICS	A61K009-50
	NCL	424499000
US 2002142050	ECLA	A61K009/16P4; A61K009/16P2 <--
US 6395300	ECLA	A61K009/16P4; A61K009/16P2 <--
US 6645528	ECLA	A61K009/16H2; A61K009/16H6B; A61K009/16H4B; A61K009/16P4; A61K009/16P2 <--

AB Drugs, especially low aqueous solubility drugs, are provided in a porous matrix form, preferably microparticles, which enhances dissoln. of the drug in aqueous media. The drug matrixes preferably are made using a process that includes (i) dissolving a drug, preferably a drug having low aqueous solubility, in a volatile solvent to form a drug solution, (ii) combining at least one pore forming agent with the drug solution to form an emulsion, suspension, or second solution and hydrophilic or hydrophobic excipients that stabilize the drug and inhibit crystallization, and (iii) removing the volatile solvent and pore forming agent from the emulsion, suspension, or second solution to yield the porous matrix of drug. Hydrophobic or hydrophilic excipients may be selected to stabilize the drug in crystalline form by inhibiting crystal growth or to stabilize the drug in amorphous form by preventing crystallization. The pore forming agent can be either a volatile liquid that is immiscible with the drug solvent or a volatile solid compound, preferably a volatile salt. In a preferred embodiment, spray drying is used to remove the solvents and the pore forming agent. The resulting porous matrix has a faster rate of dissoln. following administration to a patient, as compared to non-porous matrix forms of the drug. In a preferred embodiment, microparticles of the porous drug matrix are reconstituted with an aqueous medium and administered parenterally, or processed using standard techniques into tablets or capsules for oral administration. Thus, 5.46 g of PEG 8000, 0.545 g of prednisone, and 0.055 g of Span 40 were dissolved in 182 mL of methylene chloride. A solution of 3.27 g of ammonium bicarbonate in 18.2 mL of water was added to the organic solution (phase ratio 1:10) and homogenized for 5 min at 16,000 RPM. The resulting emulsion was spray dried on a benchtop spray dryer using an air-atomizing nozzle and nitrogen as the drying gas.

ST porous drug matrix microparticle prednisone bicarbonate  
 IT Drug delivery systems  
 (buccal; porous drug matrixes and methods of manufacture thereof)

IT Estrogens  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (conjugated; porous drug matrixes and methods of manufacture thereof)

IT Drying  
 (fluid bed; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems  
 (inhalants; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems  
 (injections, i.m.; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems  
 (injections, i.v.; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems  
 (injections, s.c.; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems  
 (microparticles; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems  
 (nasal; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems  
 (ophthalmic; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems  
 (oral; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems  
 (parenterals; porous drug matrixes and methods of manufacture thereof)

IT Dissolution  
 Freeze drying  
 Preservatives  
 Solvents  
 (porous drug matrixes and methods of manufacture thereof)

IT Amino acids, biological studies  
 Carbohydrates, biological studies  
 Granulocyte colony-stimulating factor receptors  
 Interferons  
 Interleukins  
 Lecithins  
 Polymers, biological studies  
 Polyoxyalkylenes, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (porous drug matrixes and methods of manufacture thereof)

IT Crystallization  
 (prevention of; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems  
 (rectal; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems  
 (sublingual; porous drug matrixes and methods of manufacture thereof)

IT Drying  
 (vacuum; porous drug matrixes and methods of manufacture thereof)

IT Drug delivery systems  
 (vaginal; porous drug matrixes and methods of manufacture thereof)

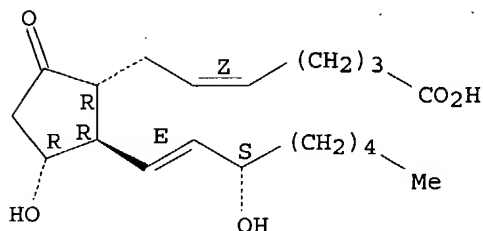
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 Verapamil 53-03-2, Prednisone 55-98-1, Busulfan 57-63-6, Ethinyl  
 estradiol 58-61-7, Adenosine, biological studies 59-92-7, Levodopa,  
 biological studies 67-78-7 67-97-0, Vitamin D3 71-58-9,  
 Medroxyprogesterone acetate 75-64-9, Erbumine, biological studies  
 77-36-1, Chlorthalidone 89-57-6, Mesalamine 126-07-8, Griseofulvin  
 128-13-2, Ursodiol 298-46-4, Carbamazepine 302-79-4, Tretinoin  
 321-64-2, Tacrine 363-24-6, Dinoprostone 437-38-7, Fentanyl  
 439-14-5, Diazepam 443-48-1, Metronidazole 518-28-5, Podofilox  
 631-61-8, Ammonium acetate 657-24-9, Metformin 745-65-3,  
 Alprostadil 846-49-1, Lorazepam 1066-33-7, Ammonium bicarbonate  
 1863-63-4, Ammonium benzoate 1951-25-3, Amiodarone 3239-44-9,  
 Dexfenfluramine 4759-48-2, Isotretinoin 5534-09-8, Beclomethasone  
 dipropionate 5593-20-4, Betamethasone dipropionate 9002-68-0,



Follitropin 9002-72-6, Growth hormone 9005-65-6, Tween 80  
 9007-12-9, Calcitonin 9041-93-4, Bleomycin sulfate 10238-21-8,  
 Glyburide 11096-26-7, Erythropoietin 12125-02-9, Ammonium chloride,  
 biological studies 12629-01-5, Somatropin 12633-72-6, Amphotericin  
 13311-84-7, Flutamide 15307-79-6, Diclofenac sodium 15307-86-5,  
 Diclofenac 15687-27-1, Ibuprofen 18559-94-9, Albuterol 20830-75-5,  
 Digoxin 21256-18-8, Oxaprozin 21829-25-4, Nifedipine 22204-53-1,  
 Naproxen 25322-68-3, Polyethylene glycol 26266-57-9, Span 40  
 27203-92-5, Tramadol 28860-95-9, Carbidopa 28981-97-7, Alprazolam.  
 29094-61-9, Glipizide 30516-87-1, Zidovudine 32986-56-4, Tobramycin  
 33069-62-4, Paclitaxel 34911-55-2, Bupropion 36505-84-7, Buspirone  
 40391-99-9 41340-25-4, Etodolac 41575-94-4, Carboplatin 42399-41-7,  
 Diltiazem 42924-53-8, Nabumetone 51333-22-3, Budesonide 51773-92-3,  
 Mefloquine hydrochloride 54143-55-4, Flecainide 54527-84-3,  
 Nicardipine hydrochloride 54910-89-3, Fluoxetine 54965-21-8,  
 Albendazole 54965-24-1, Tamoxifen citrate 55268-75-2, Cefuroxime  
 56124-62-0, Valrubicin 56180-94-0, Acarbose 60142-96-3, Gabapentin  
 60205-81-4, Ipratropium. 63659-18-7, Betaxolol 65277-42-1,  
 Ketoconazole 66085-59-4, Nimodipine 66376-36-1, Alendronate  
 66852-54-8, Halobetasol propionate 68693-11-8, Modafinil 69655-05-6,  
 Didanosine 70476-82-3, Mitoxantrone hydrochloride 72432-03-2, Miglitol  
 72509-76-3, Felodipine 72558-82-8, Ceftazidime 72956-09-3, Lovendilol  
 73384-59-5, Ceftriaxone 73590-58-6, Omeprazole 75330-75-5, Lovastatin  
 75695-93-1, Isradipine 75847-73-3, Enalapril 76095-16-4, Enalapril  
 maleate 76547-98-3, Lisinopril 76824-35-6, Famotidine 76963-41-2,  
 Nizatidine 77883-43-3, Doxazosin mesylate 78246-49-8, Paroxetine  
 hydrochloride 78628-80-5, Terbinafine hydrochloride 78755-81-4,  
 Flumazenil 79517-01-4, Octreotide acetate 79559-97-0, Sertraline  
 hydrochloride 79794-75-5, Loratadine 79902-63-9, Simvastatin  
 80274-67-5, Metoprolol fumarate 81098-60-4, Cisapride 81103-11-9,  
 Clarithromycin 82410-32-0, Ganciclovir 82752-99-6, Nefazodone  
 hydrochloride 82834-16-0, Perindopril 83799-24-0, Fexofenadine  
 83905-01-5, Azithromycin 83919-23-7, Mometasone furoate 84625-61-6,  
 Itraconazole 86386-73-4, Fluconazole 86541-74-4, Benazepril  
 hydrochloride 86541-75-5, Benazepril 87679-37-6, Trandolapril  
 89778-27-8, Toremifene citrate 90566-53-3, Fluticasone 91161-71-6,  
 Terbinafine 91421-42-0, Rubitecan 93413-69-5, Venlafaxine  
 93957-54-1, Fluvastatin 95058-81-4, Gemcitabine 95233-18-4, Atovaquone  
 97048-13-0, Urofollitropin 97322-87-7, Troglitazone 98048-97-6,  
 Fosinopril 98079-52-8, Lomefloxacin hydrochloride 98319-26-7,  
 Finasteride 99011-02-6, Imiquimod 99294-93-6, Zolpidem tartrate  
 100286-90-6, Irinotecan hydrochloride 100986-85-4, Levofloxacin  
 103577-45-3, Lansoprazole 103628-48-4, Sumatriptan succinate  
 103775-10-6, Moexipril 104227-87-4, Famciclovir 104632-25-9,  
 Pramipexole dihydrochloride 106266-06-2, Risperidone 106392-12-5,  
 Pluronic f127 106463-17-6, Tamsulosin hydrochloride 106685-40-9,  
 Adapalene 107753-78-6, Zafirlukast 109889-09-0, Granisetron  
 110871-86-8, Sparfloxacin 111470-99-6, Amlodipine besylate  
 111974-72-2, Quetiapine fumarate 112809-51-5, Letrozole 113806-05-6,  
 Olopatadine 114798-26-4, Losartan 114977-28-5, Docetaxel  
 115956-12-2, Dolasetron 120014-06-4, Donepezil 124832-26-4,  
 Valacyclovir 127779-20-8, Saquinavir 131918-61-1, Paricalcitol  
 132539-06-1, Olanzapine 134308-13-7, Tolcapone 134678-17-4, Lamivudine  
 137862-53-4, Valsartan 140678-14-4, Mangafodipir trisodium  
 142373-60-2, Tirofiban hydrochloride 144701-48-4, Telmisartan  
 145040-37-5, Candesartan cilexetil 147059-72-1, Trovafloxacin  
 147245-92-9, Glatiramer acetate 150378-17-9, Indinavir 154248-97-2,  
 Imiglucerase 154598-52-4, Efavirenz 155141-29-0, Rosiglitazone maleate  
 155213-67-5, Ritonavir 158966-92-8, Montelukast 159989-65-8,  
 Nelfinavir mesylate 161814-49-9, Amprenavir 162011-90-7, Rofecoxib  
 169590-42-5, Celecoxib 171599-83-0, Sildenafil citrate 260779-88-2,  
 Cisapride monohydrate 679809-58-6, Enoxaparin sodium  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

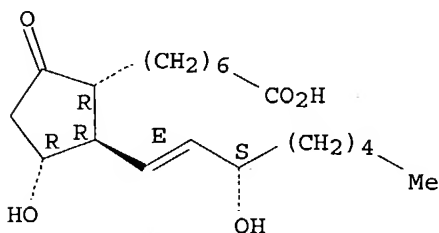
(porous drug matrixes and methods of manufacture thereof)  
 IT 363-24-6, Dinoprostone 745-65-3, Alprostadi  
 9005-65-6, Tween 80  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (porous drug matrixes and methods of manufacture thereof)  
 RN 363-24-6 HCAPLUS  
 CN Prosta-5,13-dien-1-oic acid, 11,15-dihydroxy-9-oxo-,  
 (5Z,11 $\alpha$ ,13E,15S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



RN 745-65-3 HCAPLUS  
 CN Prost-13-en-1-oic acid, 11,15-dihydroxy-9-oxo-, (11 $\alpha$ ,13E,15S) - (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



RN 9005-65-6 HCAPLUS  
 CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
 (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L116 ANSWER 10 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:368323 HCAPLUS  
 DN 136:363886  
 ED Entered STN: 18 May 2002  
 TI Improved treatment of glaucoma by intraocular pressure-reducing  
 agent combination  
 IN Richardson, Helene; Zimmerman, Thom J.; Challoner, Teresa; Jonsson, Per;  
 Groenbladh, Anna; Oehagen, Patrik; Gieseke, Donald  
 PA Pharmacia AB, Swed.  
 SO PCT Int. Appl., 24 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K031-5575  
 ICS A61K031-535  
 CC 1-12 (Pharmacology)

## Section cross-reference(s): 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002038158	A1	20020516	WO 2001-SE2499	20011112 <--
	WO 2002038158	C1	20030130		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2003018079	A1	20030123	US 2001-35963	20011109 <--
	AU 2002015277	A5	20020521	AU 2002-15277	20011112 <--
	EP 1333837	A1	20030813	EP 2001-983882	20011112 <--
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	BR 2001015208	A	20031007	BR 2001-15208	20011112 <--
	JP 2004513148	T2	20040430	JP 2002-540741	20011112 <--
	NO 2003002122	A	20030701	NO 2003-2122	20030512 <--
PRAI	US 2000-248123P	P	20001113	<--	
	WO 2001-SE2499	W	20011112	<--	

## CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2002038158	ICM	A61K031-5575
		ICS	A61K031-535
	JP 2004513148	FTERM	4C084/AA20; 4C084/BA44; 4C084/CA59; 4C084/MA02; 4C084/MA58; 4C084/NA05; 4C084/NA14; 4C084/ZA212; 4C084/ZA332; 4C084/ZA392; 4C084/ZC022; 4C084/ZC202; 4C086/AA01; 4C086/AA02; 4C086/BC85; 4C086/DA02; 4C086/GA09; 4C086/GA10; 4C086/MA02; 4C086/MA17; 4C086/MA58; 4C086/NA05; 4C086/NA14; 4C086/ZA21; 4C086/ZA33; 4C086/ZA39; 4C086/ZC02; 4C086/ZC20 <--
AB	The present invention is directed to using two or more agents in combination with capacity of reducing the <b>intraocular</b> pressure (IOP) in a therapy with an improved efficacy to treat advanced glaucoma in such patients who suffer from detectable vision related impairments, when said agents are administered simultaneously. The combined use will also find advantage in treatment of individuals in need of a high IOP-reduction, such as those being exposed to risk factors rendering them susceptible to visual impairments. A fixed combination of <b>latanoprost</b> (50 µg/mL) and timolol (5 mg/mL) showed an unexpected efficacy in patients suffering from both abnormalities of the optic nerve head and visual field defects when compared to patients having an elevated IOP but otherwise free from complications. <b>Eye</b> drop formulations are given.		
ST	glaucoma combination therapy; <b>intraocular</b> pressure reducing agent combination antiglaucoma; <b>latanoprost</b> timolol <b>eye</b> drop glaucoma treatment		
IT	Quaternary ammonium compounds, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (alkylbenzyl dimethyl, chlorides; improved treatment of glaucoma by <b>intraocular</b> pressure-reducing agent combination)		
IT	<b>Vision</b> (disorder, field defects; improved treatment of glaucoma by <b>intraocular</b> pressure-reducing agent combination)		
IT	Antiglaucoma agents Human (improved treatment of glaucoma by <b>intraocular</b> pressure-reducing agent combination)		

IT Ischemia  
(in region of optical nerve head; improved treatment of glaucoma by  
intraocular pressure-reducing agent combination)

IT Eye  
(intraocular pressure, reduction of; improved treatment of  
glaucoma by intraocular pressure-reducing agent combination)

IT Prostaglandins  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(intraocular pressure-reducing; improved treatment of  
glaucoma by intraocular pressure-reducing agent combination)

IT Drug delivery systems  
(ophthalmic; improved treatment of glaucoma by  
intraocular pressure-reducing agent combination)

IT Eye, disease  
(optical nerve head damage; improved treatment of glaucoma by  
intraocular pressure-reducing agent combination)

IT Drug delivery systems  
(solns., ophthalmic; improved treatment of glaucoma by  
intraocular pressure-reducing agent combination)

IT Eye  
(uveosclera, agent increasing vitreous humor outflow from; improved  
treatment of glaucoma by intraocular pressure-reducing agent  
combination)

IT Eye  
(vitreous humor, agent increasing uveoscleral outflow of or reducing  
formation of; improved treatment of glaucoma by intraocular  
pressure-reducing agent combination)

IT Adrenoceptor agonists  
( $\beta$ -; improved treatment of glaucoma by intraocular  
pressure-reducing agent combination)

IT 26839-75-8, Timolol 26921-17-5, Timolol maleate 120373-24-2,  
Isopropyl unoprostone 130209-82-4,  
Latanoprost 157283-68-6, Travoprost  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(improved treatment of glaucoma by intraocular  
pressure-reducing agent combination)

IT 1310-73-2, Sodium hydroxide, biological studies 7558-79-4, Disodium  
phosphate 7558-80-7, Sodium dihydrogen phosphate 7647-01-0,  
Hydrochloric acid, biological studies 7647-14-5, Sodium chloride,  
biological studies 7732-18-5, Water, biological studies  
9005-65-6, Polysorbate 80  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(improved treatment of glaucoma by intraocular  
pressure-reducing agent combination)

IT 9001-03-0, Carbonic anhydrase  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors; improved treatment of glaucoma by intraocular  
pressure-reducing agent combination)

IT 551-11-1D, Prostaglandin F<sub>2</sub> $\alpha$ , derivs.  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(intraocular pressure-reducing; improved treatment of  
glaucoma by intraocular pressure-reducing agent combination)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

(1) Kiyoshi, I; Jpn J Ophthalmol 2000, V44, P227  
(2) Michael, D; Graefe's Arch Clin Exp Ophthalmol 1998, V236, P577  
(3) Michael, D; Survey of Ophthalmology 1997, V41, PS77  
(4) Peter, R; Arch Ophthalmol 1996, V114, P268

IT 120373-24-2, Isopropyl unoprostone  
130209-82-4, Latanoprost 157283-68-6,

## Travoprost

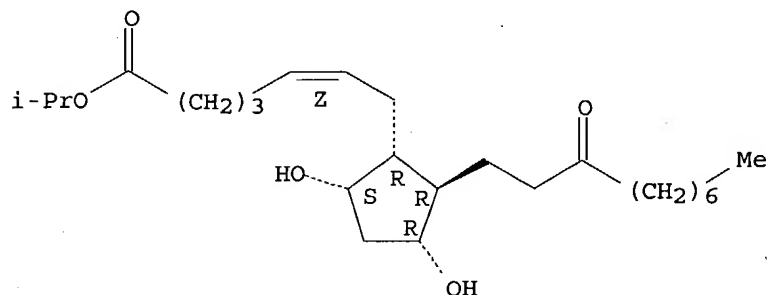
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)

(improved treatment of glaucoma by **intraocular**  
pressure-reducing agent combination)

RN 120373-24-2 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

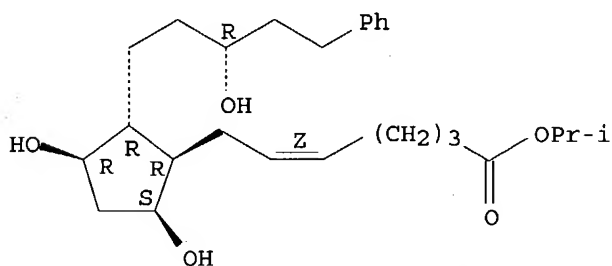
Absolute stereochemistry.  
Double bond geometry as shown.



RN 130209-82-4 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

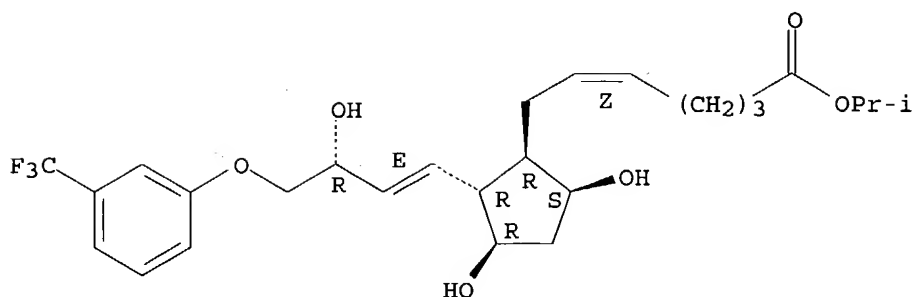
Absolute stereochemistry.  
Double bond geometry as shown.



RN 157283-68-6 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E,3R)-3-hydroxy-4-[3-(trifluoromethyl)phenoxy]-1-butenyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).  
Double bond geometry as shown.



IT 9005-65-6, Polysorbate 80

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(improved treatment of glaucoma by **intraocular**  
pressure-reducing agent combination)

RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
(9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

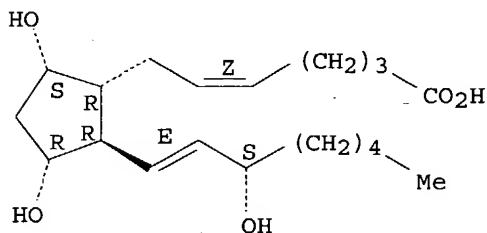
IT 551-11-1D, Prostaglandin F2 $\alpha$ , derivs.

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
(Biological study); USES (Uses)  
(**intraocular** pressure-reducing; improved treatment of  
glaucoma by **intraocular** pressure-reducing agent combination)

RN 551-11-1 HCAPLUS

CN Prosta-5,13-dien-1-oic acid, 9,11,15-trihydroxy-,  
(5Z,9 $\alpha$ ,11 $\alpha$ ,13E,15S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L116 ANSWER 11 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:220376 HCAPLUS

DN 136:252497

ED Entered STN: 22 Mar 2002

TI Eye drops containing prostaglandin derivatives and nonionic  
surfactants and/or antioxidants

IN Morishima, Kenji; Kimura, Akio; Asada, Hiroyuki; Umeda, Masayuki; Kuwano,  
Mitsuaki

PA Santen Pharmaceutical Co., Ltd., Japan; Asahi Glass Company, Ltd.

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM A61K031-5575

ICS A61K009-08; A61K047-34; A61K047-44; A61K047-18; A61K047-10;  
A61P027-02

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002022131	A1	20020321	WO 2001-JP7928	20010913 <--
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	AU 2001086210	A5	20020326	AU 2001-86210	20010913 <--
	JP 2002161037	A2	20020604	JP 2001-277356	20010913 <--
	EP 1321144	A1	20030625	EP 2001-965597	20010913 <--
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
	NO 2003001138	A	20030512	NO 2003-1138	20030312 <--
	US 2004097592	A1	20040520	US 2003-380401	20030312 <--
PRAI	JP 2000-277554	A	20000913	<--	
	WO 2001-JP7928	W	20010913	<--	

## CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 2002022131	ICM	A61K031-5575
		ICS	A61K009-08; A61K047-34; A61K047-44; A61K047-18; A61K047-10; A61P027-02
AB	It is intended to produce <b>eye</b> drop preps. containing prostaglandin derivs. which are hardly soluble in water and liable to be adsorbed by resin containers or prostaglandin derivs. which are liable to decompose when dissolved in water. The solubility of prostaglandin derivs. in water can be improved and the adsorption thereof by resin containers can be remarkably inhibited by adding nonionic surfactants such as polysorbate 80 or polyoxyethylene-hardened castor oil 60 to <b>eye</b> drops. Moreover, the decomposition of prostaglandin derivs. can be remarkably inhibited by adding antioxidants such as disodium ethylenediaminetetraacetate or dibutylhydroxytoluene. The effect of addition of polysorbate 80 at 0.01 % in a solution containing 16-Phenoxy-15-deoxy-15,15-difluoro-17,18,19,20-tetranorprostaglandin F2 $\alpha$ iso-Pr ester 0.001 % in a polyethylene container on prevention of adsorption of the prostaglandin derivative to the container during storage was examined		
ST	prostaglandin deriv <b>ophthalmic</b> soln nonionic surfactant		
IT	Antioxidants ( <b>eye</b> drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants)		
IT	<b>Prostaglandins</b> RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) ( <b>eye</b> drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants)		
IT	Polyesters, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) ( <b>eye</b> drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants in resin containers)		
IT	Castor oil RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (hydrogenated, ethoxylated; <b>eye</b> drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants)		
IT	Surfactants (nonionic; <b>eye</b> drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants)		
IT	Drug delivery systems		

(solns., ophthalmic; eye drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants)

IT 139-33-3, Disodium ethylenediaminetetraacetate 551-11-1D, Prostaglandin F2 $\alpha$ , derivs. 9005-65-6, Polysorbate 80 30587-81-6, Dibutylhydroxytoluene 209860-87-7  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (eye drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants)

IT 9002-88-4, Polyethylene 9003-07-0, Polypropylene 24968-11-4, Polyethylene naphthalate 25038-59-9, Polyethylene terephthalate, biological studies 25230-87-9  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (eye drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants in resin containers)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE

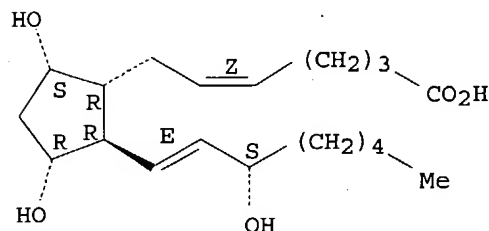
- (1) Alcon Laboratories Inc; JP 06316525 A 1994 HCAPLUS
- (2) Alcon Laboratories Inc; CA 2112027 A 1994 HCAPLUS
- (3) Alcon Laboratories Inc; US 5565492 A 1994 HCAPLUS
- (4) Alcon Laboratories Inc; EP 603800 A 1994 HCAPLUS
- (5) Alcon Laboratories Inc; AU 665287 B 1994 HCAPLUS
- (6) Allergan Inc; JP 09506081 A 1996
- (7) Allergan Inc; US 5486540 A 1996 HCAPLUS
- (8) Allergan Inc; US 5486540 A 1996 HCAPLUS
- (9) Allergan Inc; EP 725643 A 1996 HCAPLUS
- (10) Allergan Inc; AU 9480844 A 1996
- (11) Allergan Inc; WO 9511682 A 1996
- (12) Santen Pharmaceutical Co Ltd; JP 11071344 A 1998 HCAPLUS
- (13) Santen Pharmaceutical Co Ltd; CA 2225761 A 1998 HCAPLUS
- (14) Santen Pharmaceutical Co Ltd; US 5886035 A 1998 HCAPLUS
- (15) Santen Pharmaceutical Co Ltd; US 5985920 A 1998 HCAPLUS
- (16) Santen Pharmaceutical Co Ltd; EP 850926 A 1998 HCAPLUS
- (17) Santen Pharmaceutical Co Ltd; JP 10251225 A 1999 HCAPLUS
- (18) Santen Pharmaceutical Co Ltd; EP 930296 A 1999 HCAPLUS

IT 551-11-1D, Prostaglandin F2 $\alpha$ , derivs. 9005-65-6, Polysorbate 80 209860-87-7  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (eye drops containing prostaglandin derivs. and nonionic surfactants and/or antioxidants)

RN 551-11-1 HCAPLUS

CN Prosta-5,13-dien-1-oic acid, 9,11,15-trihydroxy-, (5Z,9 $\alpha$ ,11 $\alpha$ ,13E,15S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

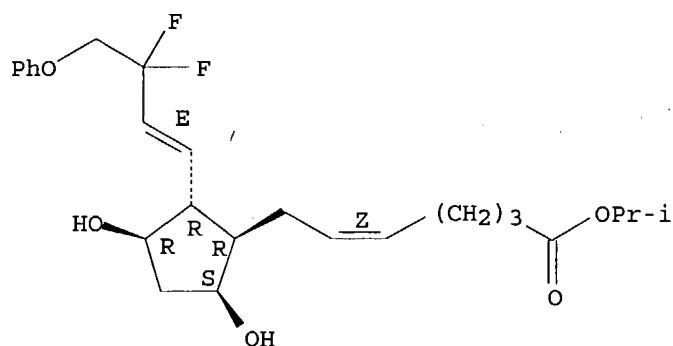
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 209860-87-7 HCAPLUS



CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-2-[(1E)-3,3-difluoro-4-phenoxy-1-butenyl]-3,5-dihydroxycyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L116 ANSWER 12 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:122796 HCAPLUS

DN 136:172791

ED Entered STN: 15 Feb 2002

TI Aqueous pharmaceutical compositions having a low gelation temperature

IN Suzuki, Hidekazu; Wada, Takahiro; Kirita, Masanobu; Takeuchi, Masanobu

PA Wakamoto Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM A61K031-5383

ICS A61K009-08; A61K047-12; A61K047-34; A61K047-38; A61P031-04

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002011734	A1	20020214	WO 2001-JP6805	20010808 <--
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
JP 2003160473	A2	20030603	JP 2000-240455	20000808 <--
JP 3450805	B2	20030929		
AU 2001078696	A5	20020218	AU 2001-78696	20010808 <--
EP 1312366	A1	20030521	EP 2001-956809	20010808 <--
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 3504656	B2	20040308	JP 2002-517070	20010808 <--
NO 2003000533	A	20030226	NO 2003-533	20030203 <--
US 2003194441	A1	20031016	US 2003-344189	20030602 <--
PRAI JP 2000-240455	A	20000808	<--	
WO 2001-JP6805	W	20010808	<--	

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

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WO 2002011734 ICM A61K031-5383  
ICS A61K009-08; A61K047-12; A61K047-34; A61K047-38;  
A61P031-04

EP 1312366 ECLA A61K009/00M16; A61K031/5383 <--  
US 2003194441 ECLA A61K009/00M16; A61K031/5383; A61K047/00R <--

AB The invention aims at providing an antimicrobial aqueous pharmaceutical composition  
and an aqueous pharmaceutical composition which have a sufficiently low gelation temperature even when contain new quinolone antimicrobial agents such as ofloxacin as the active ingredient and can stay at the site of administration for a long time by virtue of rapid **viscosity** increase after administration in spite of their being liquid at administration and thereby attain high availability. The invention relates to an antimicrobial aqueous pharmaceutical composition containing 2.8 to 4 % weight/volume of Me cellulose, 2 weight/volume aqueous solution of which has a **viscosity** of 12mPa s or below at 20°, 1.5 to 2.3 % weight/volume of citric acid, 2 to 4 % weight/volume of polyethylene glycol, and 0.1 to 0.5 % weight/volume of ofloxacin.

ST pharmaceutical soln gelation cellulose citrate PEG; ofloxacin soln thermal gelation

IT Polyoxyalkylenes, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aqueous pharmaceutical compns. with low gelation temperature)

IT Drug delivery systems  
(solns., **ophthalmic**; aqueous pharmaceutical compns. with low gelation temperature)

IT Drug delivery systems  
(solns.; aqueous pharmaceutical compns. with low gelation temperature)

IT Gelation  
(thermal; aqueous pharmaceutical compns. with low gelation temperature)

IT 50-21-5, Lactic acid, biological studies 52-21-1, Prednisolone acetate  
54-71-7, Pilocarpine hydrochloride 56-84-8, Asparaginic acid, biological studies 61-76-7, Phenylephrine hydrochloride 72-17-3, Sodium lactate  
77-92-9, Citric acid, biological studies 110-15-6, Succinic acid, biological studies 110-16-7, Maleic acid, biological studies 151-73-5, Betamethasone sodium phosphate 426-13-1, Fluorometholone 518-47-8, Sodium fluorescein 526-95-4, Gluconic acid 527-07-1, Sodium gluconate 1043-21-6, Pirenexine 1405-41-0, Gentamicin sulfate 1508-75-4, Tropicamide 7704-73-6, Sodium fumarate 9004-67-5, Methyl cellulose 14475-11-7, Sodium tartrate 15307-79-6, Diclofenac sodium 15826-37-6, Sodium cromoglycate 16177-21-2, Sodium L-glutamate 18016-19-8, Sodium maleate 25322-68-3, Polyethylene glycol 26921-17-5, Timolol maleate 34580-14-8, Ketotifen fumarate 51781-21-6, Carteolol hydrochloride 52549-17-4, Pranoprofen 53902-12-8, Tranilast 59277-89-3, Acyclovir 59865-13-3, Cyclosporin A 63659-19-8, Betaxolol hydrochloride 81486-22-8, Nipradilol 82419-36-1, Ofloxacin 91714-93-1, Bromfenac sodium 100986-85-4, Levofloxacin 114607-46-4, Acitazanolast 120373-24-2, **Isopropylunoprostone** 186826-86-8, Moxifloxacin hydrochloride

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aqueous pharmaceutical compns. with low gelation temperature)

RE.CNT 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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(19) Shin-Etsu Chemical Company Ltd; US 6171616 B1 1999 HCAPLUS  
(20) Shin-Etsu Chemical Company Ltd; EP 950419 A1 1999 HCAPLUS  
(21) Wakamoto Pharmaceutical Co Ltd; CN 1048393 B 1996  
(22) Wakamoto Pharmaceutical Co Ltd; IL 107626 A1 1996 HCAPLUS  
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(48) Wakamoto Pharmaceutics Co Ltd; WO 9830221 A1 1998 HCAPLUS  
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IT 9004-67-5, Methyl cellulose 120373-24-2,  
Isopropylunoprostone  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(aqueous pharmaceutical compns. with low gelation temperature)  
RN 9004-67-5 HCAPLUS  
CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

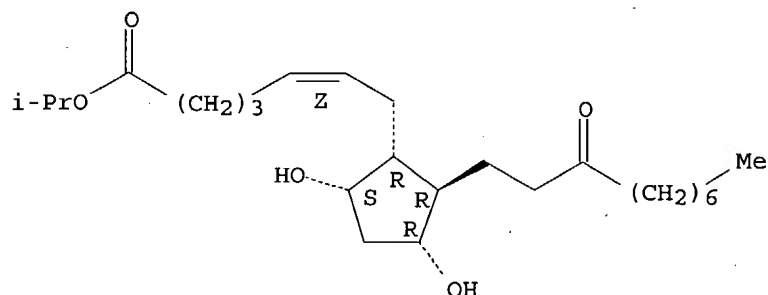
CRN 67-56-1  
CMF C H4 O

H<sub>3</sub>C-OH

RN 120373-24-2 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L116 ANSWER 13 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:11105 HCAPLUS

DN 136:90949

ED Entered STN: 04 Jan 2002

TI Compositions containing **isopropyl unoprostone** for reducing ocular hypertension

IN Reed, Kenneth Warren; Yen, Shau Fong; Sou, Mary; Peacock, Regina Flinn

PA Novartis AG, USA

SO U.S. Pat. Appl. Publ., 13 pp., Cont.-in-part of U.S. Ser. No. 42,817, abandoned.

CODEN: USXXCO

DT Patent

LA English

IC ICM A61K031-445

NCL 514330000

CC 63-6 (Pharmaceuticals)

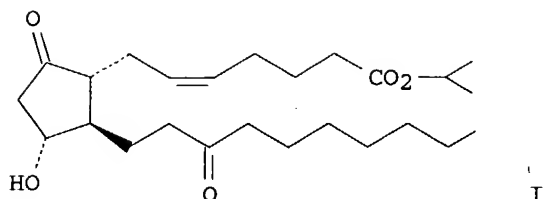
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002002185	A1	20020103	US 2001-812162	20010319 <--
	US 6770675	B2	20040803		
PRAI	US 1997-93065P	P	19970317	<--	
	US 1998-42817	B2	19980317	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2002002185	ICM	A61K031-445
	NCL	514330000

GI



- AB An improved **ophthalmic** composition, includes docosanoid active agents, which are especially useful in lowering **intraocular** pressure associated with glaucoma. Improvements in IOP reduction efficacy, preservative efficacy and reduced additive concns. are achieved by utilizing the disclosed compns. which include a docosanoid active agent (e.g., iso-Pr **unoprostone**, I), in conjunction with selected nonionic surfactants, preservatives, and nonionic tonicity adjusting agents.
- ST **ocular** hypertension compn docosanoid; glaucoma **isopropyl unoprostone** compn
- IT Quaternary ammonium compounds, biological studies  
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (alkylbenzyl dimethyl, chlorides; compns. containing iso-Pr **unoprostone** for reducing **ocular** hypertension)
- IT Antiglaucoma agents  
 Buffers  
 Chelating agents  
 Preservatives  
 (compns. containing iso-Pr **unoprostone** for reducing **ocular** hypertension)
- IT Polyoxyalkylenes, biological studies  
 Quaternary ammonium compounds, biological studies  
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (compns. containing iso-Pr **unoprostone** for reducing **ocular** hypertension)
- IT Surfactants  
 (nonionic; compns. containing iso-Pr **unoprostone** for reducing **ocular** hypertension)
- IT Fatty acids, biological studies  
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (sodium salts; compns. containing iso-Pr **unoprostone** for reducing **ocular** hypertension)
- IT Drug delivery systems  
 (solns., **ophthalmic**; compns. containing iso-Pr **unoprostone** for reducing **ocular** hypertension)
- IT 11129-12-7, Borate 14265-44-2, Phosphate, biological studies  
 RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (buffer; compns. containing iso-Pr **unoprostone** for reducing **ocular** hypertension)
- IT 50-70-4, Sorbitol, biological studies 54-64-8, Thimerosal 55-56-1, Chlorhexidine 56-81-5, Glycerol, biological studies 57-09-0, Cetyltrimethylammonium bromide 57-15-8, Chlorobutanol 59-50-7, 3-Methyl-4-chlorophenol 60-00-4, Edta, biological studies 60-12-8, 2-Phenylethanol 69-65-8, D-Mannitol 80-46-6, 4-tert-Amylphenol 90-43-7, 2-Phenylphenol 95-56-7D, o-Bromophenol, alkyl derivs. 95-57-8D, o-Chlorophenol, alkyl derivs. 97-23-4 98-54-4, 4-tert-Butylphenol 100-51-6, Benzenemethanol, biological studies 106-41-2D, p-Bromophenol, alkyl derivs. 106-48-9D, p-Chlorophenol, alkyl derivs. 112-80-1D, Oleic acid, sulfonated, sodium salts 117-80-6,

2,3-Dichloro-1,4-naphthoquinone 120-32-1, 2-Benzyl-4-chlorophenol  
 121-54-0, Benzethonium chloride 122-99-6, 2-Phenoxyethanol 123-03-5,  
 Cetylpyridinium chloride 148-24-3, 8-Quinolinol, biological studies  
 1321-23-9, Chloroxylenol 1331-61-9, Benzenesulfonic acid, dodecyl-,  
 ammonium salt 2027-47-6D, 9-Octadecenoic acid, sulfonated 3772-94-9,  
 Pentachlorophenyl laurate 5324-84-5, Sodium 1-octanesulfonate  
 5964-24-9, Thimerfonate sodium 9004-98-2, Brij 97 9005-63-4D,  
 Polyoxyethylene sorbitan, ratty acid esters 9005-65-6,  
 Polysorbate 80 13081-16-8, 4-Chloro-2-pentylphenol 13347-42-7,  
 2-Cyclopentyl-4-chlorophenol 19379-90-9, Benzoxonium chloride  
 25155-19-5, Naphthalenesulfonic acid 25155-30-0 25322-68-3, Peg  
 25322-69-4, Polypropylene glycol 27177-77-1, Benzenesulfonic acid,  
 dodecyl-, potassium salt 28757-47-3 30260-72-1 85721-33-1,  
 Ciprofloxacin

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)

(comps. containing **iso-Pr unoprostone** for  
 reducing **ocular hypertension**)

IT 120373-24-2, **Isopropyl unoprostone**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(comps. containing **iso-Pr unoprostone** for reducing  
**ocular hypertension**)

IT 56-81-5, Glycerol, biological studies 9005-63-4D,

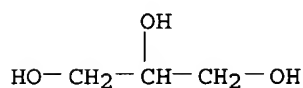
Polyoxyethylene sorbitan, ratty acid esters 9005-65-6,  
 Polysorbate 80

RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)

(comps. containing **iso-Pr unoprostone** for  
 reducing **ocular hypertension**)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



RN 9005-63-4 HCAPLUS

CN Sorbitan, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
 (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 120373-24-2, **Isopropyl unoprostone**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

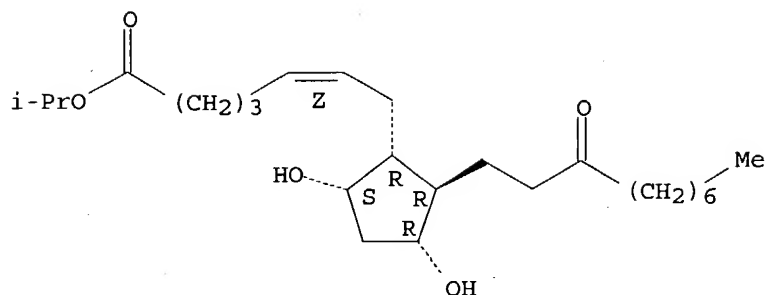
(comps. containing **iso-Pr unoprostone** for reducing  
**ocular hypertension**)

RN 120373-24-2 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-  
 oxodecyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



L116 ANSWER 14 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:392607 HCAPLUS

DN 136:144916

ED Entered STN: 31 May 2001

TI Effects of **isopropyl unoprostone ophthalmic**  
solution on cultured rabbit corneal epithelial cells

AU Wang, You-Dong; Kashiwagi, Kenji; Chen, Hai-Bo; Jin, Ming; Ou, Bo; Iizuka,  
Yoko; Tanaka, Yuko; Tsukahara, Shigeo

CS Department of Ophthalmology, Yamanashi Medical University, Yamanashi,  
409-3898, Japan

SO Ophthalmologica (2001), 215(3), 229-234

CODEN: OPHTAD; ISSN: 0030-3755

PB S. Karger AG

DT Journal

LA English

CC 1-8 (Pharmacology)

AB Purpose: To investigate the effects of iso-Pr **unoprostone**  
(referred to as **unoprostone**) **ophthalmic** solution on the  
barrier function of cultured rabbit corneal epithelium grown on permeable  
supports. Methods: Rabbit corneal epithelial cells cultured on  
collagen-coated filter inserts were administered one of the following for  
30 min: **unoprostone** in vehicle solution (polysorbate 80),  
**unoprostone** in vehicle solution with a preservative (benzalkonium  
chloride), preservative only, or vehicle only. For a control, no chems.  
were added to the medium. After administration, the transepithelial elec.  
resistance (TER) measurement, a sensitive method by which to investigate  
the barrier function, and morphol. observation using phase-contrast  
microscopy were performed before exposure and at 0.5, 1, 3, 6, 12, 24, 48,  
and 72 h after exposure. The transmission electron-microscopic  
observation was performed before and 72 h after exposure in all exptl.  
conditions. Results: The cells exposed to **unoprostone** with the  
preservative showed a significant decrease in the TER, although no  
morphol. changes were observed. The corneal epithelial cells exposed to  
**unoprostone** without preservative, the vehicle only, or the  
preservative only did not show any differences from the control group at  
any measurements. Conclusion: The corneal barrier function is damaged by  
a combined solution of **unoprostone** and preservative, but not by a  
single solution of **unoprostone**, in vitro.

ST **isopropyl unoprostone ophthalmic soln** cornea  
epithelium

IT Quaternary ammonium compounds, uses

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(alkylbenzyltrimethyl, chlorides; effects of iso-Pr **unoprostone**  
**ophthalmic** solution on cultured rabbit corneal epithelial cells)

IT **Eye**  
(cornea, epithelium; effects of iso-Pr **unoprostone**  
**ophthalmic** solution on cultured rabbit corneal epithelial cells).

IT 9005-65-6, Polysorbate 80

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(effects of iso-Pr unoprostone ophthalmic solution on  
cultured rabbit corneal epithelial cells)

IT 120373-24-2, Isopropyl unoprostone

RL: PAC (Pharmacological activity); BIOL (Biological study)  
(effects of iso-Pr unoprostone ophthalmic solution on  
cultured rabbit corneal epithelial cells)

RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE

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- (23) Wolosin, J; J Membr Biol 1988, V104, P45 HCAPLUS
- (24) Yamamoto, T; Surv Ophthalmol 1997, V41, PS99

IT 9005-65-6, Polysorbate 80

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)  
(effects of iso-Pr unoprostone ophthalmic solution on  
cultured rabbit corneal epithelial cells)

RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
(9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 120373-24-2, Isopropyl unoprostone

RL: PAC (Pharmacological activity); BIOL (Biological study)  
(effects of iso-Pr unoprostone ophthalmic solution on  
cultured rabbit corneal epithelial cells)

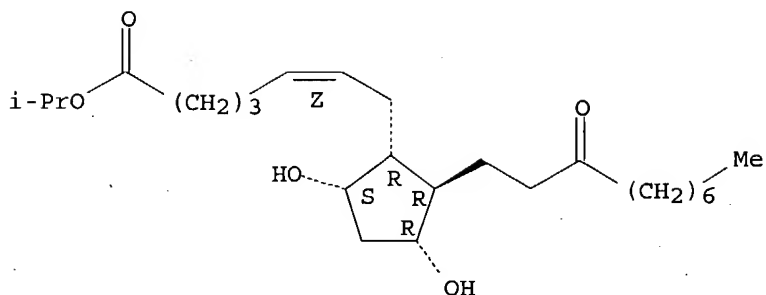
RN 120373-24-2 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.





L116 ANSWER 15 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:152470 HCAPLUS

DN 134:198100

ED Entered STN: 02 Mar 2001

TI Oral liquid pharmaceuticals containing plasticizers and solubilizers

IN Wilson, Edward S.; Trespidi, Laura A.; Clark, Christy M.; Desai, Ashok J.; Meyer, Glenn A.; Sancilio, Frederick D.

PA Applied Analytical Industries, Inc., USA

SO PCT Int. Appl., 51 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K009-48

ICS A61K009-52; A61K009-64; A61K009-66

CC 63-6 (Pharmaceuticals)

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001013897	A1	20010301	WO 2000-US19372	20000714 <--
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	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	US 6365180	B1	20020402	US 1999-354982	19990716 <--
	BR 2000012488	A	20020402	BR 2000-12488	20000714 <--
	EP 1196147	A1	20020417	EP 2000-948703	20000714 <--
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	SI 20849	C	20021031	SI 2000-20031	20000714 <--
	JP 2003507415	T2	20030225	JP 2001-518035	20000714 <--
	AU 770772	B2	20040304	AU 2000-62168	20000714 <--
	NO 2002000208	A	20020318	NO 2002-208	20020115 <--
PRAI	US 1999-354982	A	19990716	<--	
	US 1998-71865P	P	19980120	<--	
	US 1999-232354	A2	19990115	<--	
	WO 2000-US19372	W	20000714	<--	

#### CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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WO 2001013897	ICM	A61K009-48
	ICS	A61K009-52; A61K009-64; A61K009-66

AB The present invention relates to novel, liquid and semi-solid pharmaceutical compns. which can be administered in a liquid form or can be used for preparing

capsules containing such pharmaceutical compns. Also provided are methods of using and processes for preparing the pharmaceutical compns. of the present invention. Thus, a composition contained gemfibrozil 15.0, PEG-400 54.5, water 2.5, glycerin 10.0, Polysorbate-80 3.0, and PVP K29-32 15.0% by weight

ST oral liq pharmaceutical plasticizer solubilizer

IT Alcohols, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (C1-4; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Carboxylic acids, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (aromatic; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Carboxylic acids, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (arylalkyl; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Drug delivery systems  
 (capsules; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Gastrointestinal motility  
 (gastric; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Drug delivery systems  
 (liqs., oral; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Anti-inflammatory agents  
 (nonsteroidal; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Antihistamines  
 Plasticizers  
 Solubilizers  
 Stabilizing agents  
 Surfactants  
 (oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Carbohydrates, biological studies  
 Gelatins, biological studies  
 Polymers, biological studies  
 Polyoxyalkylenes, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT Drug delivery systems  
 (semisolid; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT **Lactams**  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 ( $\beta$  -; oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT 50-70-4, Sorbitol, biological studies 53-86-1, Indomethacin  
 56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol,  
 biological studies 57-66-9, Probenecid 59-92-7, Levodopa, biological  
 studies 61-33-6, biological studies 61-68-7, Mefenamic acid 69-53-4,  
 Ampicillin 99-66-1, Valproic acid 302-79-4, Retinoic acid 364-62-5,  
 Metoclopramide 530-78-9, Flufenamic acid 644-62-2, Meclofenamic acid-  
 5104-49-4, Flurbiprofen 6893-02-3, Liothyronine 9003-39-8, PVP  
 9004-64-2, Hydroxypropyl cellulose 9004-65-3, HPMC  
 9005-65-6, Tween-80 11111-12-9, Cephalosporin 12619-70-4,  
 Cyclodextrin 15307-79-6, Diclofenac sodium 15307-86-5, Diclofenac  
 15687-27-1, Ibuprofen 15826-37-6, Cromolyn sodium 16110-51-3, Cromolyn  
 22071-15-4, Ketoprofen 22204-53-1, Naproxen 22494-42-4, Diflunisal  
 25322-68-3, Polyethylene glycol 25812-30-0, Gemfibrozil 26171-23-3,  
 Tolmetin 26787-78-0, Amoxicillin 28860-95-9, Carbidopa 29679-58-1,  
 Fenoprofen 35700-23-3, Carboprost 38194-50-2, Sulindac  
 41340-25-4, Etodolac 52214-84-3, Ciprofibrate 73590-58-6, Omeprazole

74103-06-3, Ketorolac 75330-75-5, Lovastatin 79902-63-9, Simvastatin  
 81093-37-0, Pravastatin 82419-36-1, Ofloxacin 83799-24-0, Fexofenadine  
 85441-61-8, Quinapril 85721-33-1, Ciprofloxacin 93957-54-1,  
 Fluvastatin 98079-51-7, Lomefloxacin 134523-00-5, Atorvastatin  
 145599-86-6, Cerivastatin

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (oral liquid pharmaceuticals containing plasticizers and solubilizers)

IT 9000-83-3

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (proton-translocating, inhibitors; oral liquid pharmaceuticals containing  
 plasticizers and solubilizers).

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Caldwell; US 5183829 A 1993 HCAPLUS

(2) Frisbee; US 6013280 A 2000 HCAPLUS

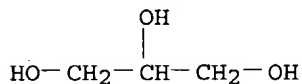
(3) Shelley; US 5505961 A 1996 HCAPLUS

IT 56-81-5, Glycerin, biological studies 9004-64-2,  
 Hydroxypropyl cellulose 9004-65-3, HPMC 9005-65-6,  
 Tween-80 35700-23-3, Carboprost

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (oral liquid pharmaceuticals containing plasticizers and solubilizers)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



RN 9004-64-2 HCAPLUS

CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

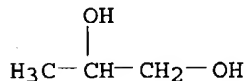
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 57-55-6

CMF C3 H8 O2



RN 9004-65-3 HCAPLUS

CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

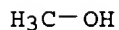
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

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CRN 67-56-1

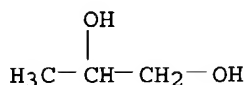
CMF C H4 O



CM 3

CRN 57-55-6

CMF C3 H8 O2

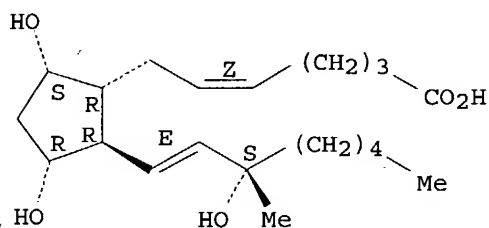


RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
(9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 35700-23-3 HCAPLUS

CN Prosta-5,13-dien-1-oic acid, 9,11,15-trihydroxy-15-methyl-,  
(5Z,9α,11α,13E,15S)- (9CI) (CA INDEX NAME)Absolute stereochemistry.  
Double bond geometry as shown.

L116 ANSWER 16 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2000:861473 HCAPLUS

DN 134:32972

ED Entered STN: 08 Dec 2000

TI Porous drug matrixes containing polymers and sugars and methods of their manufacture

IN Straub, Julie; Bernstein, Howard; Chickering, Donald E., III; Khatak, Sarwat; Randall, Greg

PA Acusphere, Inc., USA

SO PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K009-16

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI WO 2000072827 A2 20001207 WO 2000-US14578 20000525 <--  
 WO 2000072827 A3 20010125  
 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,  
 CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,  
 IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,  
 MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,  
 SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,  
 BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,  
 DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,  
 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 US 6395300 B1 20020528 US 1999-433486 19991104 <--  
 EP 1180020 A2 20020220 EP 2000-939365 20000525 <--  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO  
 BR 2000010984 A 20020430 BR 2000-10984 20000525 <--  
 JP 2003500438 T2 20030107 JP 2000-620939 20000525 <--  
 NZ 516083 A 20030829 NZ 2000-516083 20000525 <--  
 AU 768022 B2 20031127 AU 2000-54459 20000525 <--  
 US 2002041896 A1 20020411 US 2001-798824 20010302 <--  
 US 6610317 B2 20030826  
 NO 2001005753 A 20020128 NO 2001-5753 20011126 <--  
 ZA 2001010347 A 20030730 ZA 2001-10347 20011218 <--  
 PRAI US 1999-136323P P 19990527 <--  
 US 1999-158659P P 19991008 <--  
 US 1999-433486 A 19991104 <--  
 US 2000-186310P P 20000302 <--  
 WO 2000-US14578 W 20000525 <--

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000072827	ICM	A61K009-16
US 6395300	ECLA	A61K009/16P4; A61K009/16P2 <--
US 2002041896	ECLA	A61K009/16H4B; A61K009/16H6B; A61K009/16H2; A61K009/16P4 <--

AB Drugs, especially low aqueous solubility drugs, are provided in a porous matrix form,

preferably microparticles, which enhances dissoln. of the drug in aqueous media. The drug matrixes preferably are made using a process that includes (i) dissolving a drug, preferably a drug having low aqueous solubility, in a volatile solvent to form a drug solution, (ii) combining at least one pore forming agent with the drug solution to form an emulsion, suspension, or second solns., and (iii) removing the volatile solvent and pore forming agent from the emulsion, suspension, or second solution to yield the porous matrix of drug. The pore forming agent can be either a volatile liquid that is immiscible with the drug solvent or a volatile solid compound, preferably a volatile salt. In a preferred embodiment, spray drying is used to remove the solvents and the pore forming agent. The resulting porous matrix has a faster rate of dissoln. following administration to a patient, as compared to non-porous matrix forms of the drug. In a preferred embodiment, microparticles of the porous drug matrix are reconstituted with an aqueous medium and administered parenterally, or processed using standard techniques into tablets or capsules for oral administration. Paclitaxel or docetaxel can be provided in a porous matrix form, which allows the drug to be formulated without solubilizing agents and administered as a bolus. For example, a nifedipine-loaded organic solution was prepared by dissolving 9.09 g of PEG 3350, 2.27 g of nifedipine, and 0.009 g of lecithin in 182 mL of methylene chloride. An aqueous solution was prepared by dissolving 3.27 g of NH<sub>4</sub>HCO<sub>3</sub> and 0.91 g of PEG 3350 in 1.82 mL of water. The aqueous and organic solns. were homogenized and resulting emulsion

was spray dried. A suspension of the porous nifedipine drug matrix was prepared in 5% dextrose solution at a concentration of 2.5 mg/mL. A bolus injection of the suspension was tolerated when administered to dogs.

ST drug solubilization polymer sugar porous matrix; microparticle oral parenteral drug porous matrix

IT Artery  
Bone  
Eye  
Heart  
Lung  
Mucous membrane  
Neoplasm  
Skin  
Synovial fluid  
(administration to; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(bolus, injections, i.v.; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(buccal; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(capsules; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Estrogens  
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(conjugated; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Eye  
(conjunctiva, administration to; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drying  
(fluidized-bed; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Pore  
(forming agents; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Polymers, biological studies  
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(hydrophilic; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(injections, i.m.; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(injections, i.v.; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(injections, s.c.; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(intracranial; preparation of porous matrixes containing hydrophilic polymers

and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(intratracheal; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(microparticles; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(mucosal; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(nasal; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(oral; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(parenterals; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(powders; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Dissolution rate  
Emulsions  
Evaporation  
Freeze drying  
Particle size  
Solubilization  
Surface area  
Suspensions  
Wetting agents  
(preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Interferons  
Interleukins  
Taxanes  
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Carbohydrates, biological studies  
Lecithins  
Polyoxyalkylenes, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(rectal; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Volatile substances  
(solvents; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drying  
(spray; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(sublingual; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(suppositories, vaginal; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(suppositories; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(tablets; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(topical; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drying  
(vacuum; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Drug delivery systems  
(vaginal; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Salts, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(volatile, pore forming agents; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT Solvents  
(volatile; preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT 631-61-8, Ammonium acetate 1066-33-7, Ammonium bicarbonate 1863-63-4, Ammonium benzoate 12125-02-9, Ammonium chloride, uses  
RL: NUU (Other use, unclassified); USES (Uses)  
(preparation of porous matrixes containing hydrophilic polymers and sugars for enhancement of drug dissoln.)

IT 50-28-2, Estradiol, biological studies 50-35-1, Thalidomide 50-99-7, Dextrose, biological studies 52-53-9, Verapamil 53-03-2, Prednisone 55-98-1, Busulfan 57-63-6, Ethinyl estradiol 58-61-7, Adenosine, biological studies 59-92-7, Levodopa, biological studies 67-78-7 67-97-0, Vitamin D3 67-97-0D, Vitamin D3, analogs 71-58-9, Medroxyprogesterone acetate 75-64-9, Erbumine, biological studies 77-36-1, Chlorthalidone 89-57-6, Mesalamine 126-07-8, Griseofulvin 128-13-2, Ursodiol 298-46-4, Carbamazepine 302-79-4, Tretinoin 321-64-2, Tacrine 363-24-6, Dinoprostone 437-38-7, Fentanyl 439-14-5, Diazepam 443-48-1, Metronidazole 518-28-5, Podofilox 745-65-3, Alprostadil 846-49-1, Lorazepam 1951-25-3, Amiodarone 3239-44-9, Dexfenfluramine 4759-48-2, Isotretinoin 5534-09-8, Beclomethasone dipropionate 5593-20-4, Betamethasone dipropionate 9002-68-0, Follitropin 9002-72-6, Growth hormone 9007-12-9, Calcitonin 9041-93-4, Bleomycin sulfate 10238-21-8, Glyburide 11096-26-7, Erythropoietin 12629-01-5, Somatropin 12633-72-6, Amphotericin 13311-84-7, Flutamide 15307-79-6, Diclofenac sodium 15307-86-5, Diclofenac 15687-27-1, Ibuprofen 18559-94-9, Albuterol 20830-75-5, Digoxin 21256-18-8, Oxaprozin 21829-25-4, Nifedipine 22204-53-1, Naproxen 27203-92-5, Tramadol 28860-95-9, Carbidopa 28981-97-7, Alprazolam 29094-61-9, Glipizide 30516-87-1, Zidovudine 32986-56-4, Tobramycin 33069-62-4, Paclitaxel 34911-55-2, Bupropion 36505-84-7, Buspirone 40391-99-9 41340-25-4, Etodolac 41575-94-4, Carboplatin 42399-41-7, Diltiazem 42924-53-8, Nabumetone 51022-70-9, Albuterol sulfate 51333-22-3, Budesonide 51773-92-3,



Mefloquine hydrochloride 54143-55-4, Flecainide 54527-84-3,  
 Nicardipine hydrochloride 54910-89-3, Fluoxetine 54965-21-8,  
 Albendazole 54965-24-1, Tamoxifen citrate 55268-75-2, Cefuroxime  
 56124-62-0, Valrubicin 56180-94-0, Acarbose 59729-33-8, Citalopram  
 60142-96-3, Gabapentin 60205-81-4, Ipratropium 63659-18-7, Betaxolol  
 65277-42-1, Ketoconazole 66085-59-4, Nimodipine 66376-36-1,  
 Alendronate 66852-54-8, Halobetasol propionate 69655-05-6, Didanosine  
 70476-82-3, Mitoxantrone hydrochloride 72432-03-2, Miglitol  
 72509-76-3, Felodipine 72558-82-8, Ceftazidime 72956-09-3, Carvedilol  
 73384-59-5, Ceftriaxone 73590-58-6, Omeprazole 75330-75-5, Lovastatin  
 75695-93-1, Isradipine 75847-73-3, Enalapril 76095-16-4, Enalapril  
 maleate 76547-98-3, Lisinopril 76824-35-6, Famotidine 76963-41-2,  
 Nizatidine 77883-43-3, Doxazosin mesylate 78246-49-8, Paroxetine  
 hydrochloride 78628-80-5, Terbinafine hydrochloride 78755-81-4,  
 Flumazenil 79517-01-4, Octreotide acetate 79559-97-0, Sertraline  
 hydrochloride 79794-75-5, Loratadine 79902-63-9, Simvastatin  
 80274-67-5, Metoprolol fumarate 81098-60-4, Cisapride 81103-11-9,  
 Clarithromycin 82410-32-0, Ganciclovir 82752-99-6, Nefazodone  
 hydrochloride 82834-16-0, Perindopril 83799-24-0, Fexofenadine  
 83905-01-5, Azithromycin 83919-23-7, Mometasone furoate 84625-61-6,  
 Itraconazole 85721-33-1, Ciprofloxacin 86386-73-4, Fluconazole  
 86541-74-4, Benazepril hydrochloride 86541-75-5, Benazepril  
 87679-37-6, Trandolapril 89778-27-8, Toremifene citrate 91161-71-6,  
 Terbinafine 91421-42-0, Rubitecan 93413-69-5, Venlafaxine  
 93957-54-1, Fluvastatin 95058-81-4, Gemcitabine 95233-18-4, Atovaquone  
 97048-13-0, Urofollitropin 97322-87-7, Troglitazone 98048-97-6,  
 Fosinopril 98079-52-8, Lomefloxacin hydrochloride 98319-26-7,  
 Finasteride 99011-02-6, Imiquimod 99294-93-6, Zolpidem tartrate  
 100286-90-6, Irinotecan hydrochloride 100986-85-4, Levofloxacin  
 103577-45-3, Lansoprazole 103628-48-4, Sumatriptan succinate  
 103775-10-6, Moexipril 104227-87-4, Famciclovir 104632-25-9,  
 Pramipexole dihydrochloride 106266-06-2, Risperidone 106463-17-6,  
 Tamsulosin hydrochloride 106685-40-9, Adapalene 107753-78-6,  
 Zafirlukast 109889-09-0, Granisetron 110871-86-8, Sparfloxacin  
 111470-99-6, Amlodipine besylate 111974-72-2, Quetiapine fumarate  
 112809-51-5, Letrozole 113806-05-6, Olopatadine 114798-26-4, Losartan  
 114977-28-5, Docetaxel 115956-12-2, Dolasetron 120014-06-4, Donepezil  
 124832-26-4, Valacyclovir 127779-20-8, Saquinavir 131918-61-1,  
 Paricalcitol 132539-06-1, Olanzapine 134308-13-7, Tolcapone  
 134678-17-4, Lamivudine 137862-53-4, Valsartan 140678-14-4,  
 Mangafodipir trisodium 142373-60-2, Tirofiban hydrochloride  
 143011-72-7, Granulocyte colony-stimulating factor 144701-48-4,  
 Telmisartan 145040-37-5, Candesartan cilexetil 147059-72-1,  
 Trovafloxacin 147245-92-9, Glatiramer acetate 150378-17-9, Indinavir  
 154248-97-2, Imiglucerase 154598-52-4, Efavirenz 155141-29-0,  
 Rosiglitazone maleate 155213-67-5, Ritonavir 158966-92-8, Montelukast  
 159989-65-8, Nelfinavir mesylate 161814-49-9, Amprenavir 162011-90-7,  
 Rofecoxib 169590-42-5, Celecoxib 171599-83-0, Sildenafil citrate  
 679809-58-6, Enoxaparin sodium

RL: PEP (Physical, engineering or chemical process); THU (Therapeutic  
 use); BIOL (Biological study); PROC (Process); USES (Uses)

(preparation of porous matrixes containing hydrophilic polymers and sugars

for

enhancement of drug dissoln.)

IT 64-17-5, Ethanol, biological studies 9003-43-4, Polyvinylpyrrolidone  
 9005-65-6, Tween 80 25322-68-3, Polyethylene glycol  
 26266-57-9, Span 40 106392-12-5, Pluronic F127 211733-74-3

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of porous matrixes containing hydrophilic polymers and sugars

for

enhancement of drug dissoln.)

IT 363-24-6, Dinoprostone 745-65-3, Alprostadil

RL: PEP (Physical, engineering or chemical process); THU (Therapeutic

use); BIOL (Biological study); PROC (Process); USES (Uses)  
(preparation of porous matrixes containing hydrophilic polymers and sugars

for

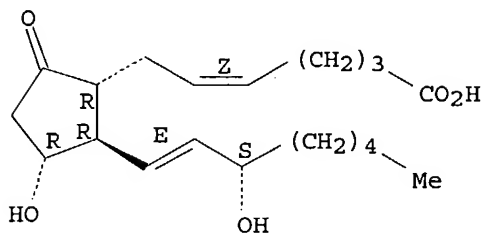
enhancement of drug dissoln.)

RN 363-24-6 HCAPLUS

CN Prosta-5,13-dien-1-oic acid, 11,15-dihydroxy-9-oxo-,  
(5Z,11 $\alpha$ ,13E,15S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

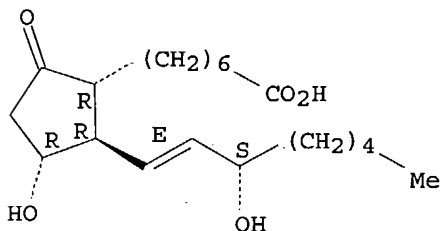


RN 745-65-3 HCAPLUS

CN Prost-13-en-1-oic acid, 11,15-dihydroxy-9-oxo-, (11 $\alpha$ ,13E,15S) - (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



IT 9005-65-6, Tween 80

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of porous matrixes containing hydrophilic polymers and sugars

for

enhancement of drug dissoln.)

RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
(9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L116 ANSWER 17 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:715858 HCAPLUS

DN 132:185338

ED Entered STN: 10 Nov 1999

TI Stability and preparation of dispersion of misoprostol-HPMC

AU Chen, Liangkang; Chen, Hailin; Zhang, Guoqing; Chen, Jianxing

CS Shanghai Institute of Planned Parenthood Research, Shanghai, 200032, Peop.  
Rep. China

SO Shenyang Yaoke Daxue Xuebao (1999), 16(Suppl.), 4-6

CODEN: SYDXFF; ISSN: 1006-2858

PB Shenyang Yaoke Daxue Xuebao Bianjibu

DT Journal

LA Chinese  
 CC 63-6 (Pharmaceuticals)  
 AB The misoprostol-HPMC solid dispersions were prepared by a solvent evaporating method. The ratio of misoprostol to HPMC was 1:100, the **viscosity** of HPMC was E5. The stability of misoprostol was significantly improved by the method of solid dispersion HPMC.  
 ST misoprostol HPMC solid dispersion prepn stability  
 IT Drug delivery systems  
     (liqs., dispersions; stability and preparation of misoprostol-HPMC dispersion)  
 IT 9004-65-3, HPMC 59122-46-2, Misoprostol  
     RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (stability and preparation of misoprostol-HPMC dispersion)  
 IT 9004-65-3, HPMC 59122-46-2, Misoprostol  
     RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
     (stability and preparation of misoprostol-HPMC dispersion)  
 RN 9004-65-3 HCAPLUS  
 CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 9004-34-6  
 CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2  
 CRN 67-56-1  
 CMF C H4 O

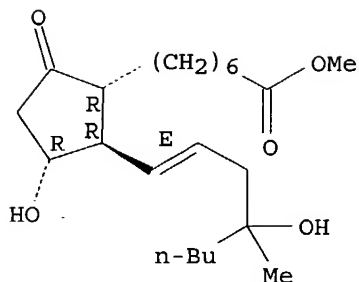
H<sub>3</sub>C-OH

CM 3  
 CRN 57-55-6  
 CMF C3 H8 O2

OH  
 |  
 H<sub>3</sub>C-CH-CH<sub>2</sub>-OH

RN 59122-46-2 HCAPLUS  
 CN Prost-13-en-1-oic acid, 11,16-dihydroxy-16-methyl-9-oxo-, methyl ester, (11 $\alpha$ ,13E)-(±)-(9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



L116 ANSWER 18 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:659274 HCAPLUS

DN 131:291295

ED Entered STN: 15 Oct 1999

TI Gelling **ophthalmic** compositions containing xanthan gum

IN Bawa, Rajan; Hall, Rex E.; Kabra, Bhagwati P.; Teague, James E.

PA Alcon Laboratories, Inc., USA

SO PCT Int. Appl., 29 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K047-36

CC 63-6 (Pharmaceuticals)

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9951273	A1	19991014	WO 1999-US6106	19990326 <--
	W: AU, BR, CA, CN, JP, KR, MX, NZ, TR, ZA				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2322579	AA	19991014	CA 1999-2322579	19990326 <--
	CA 2322579	C	20010828		
	AU 9931947	A1	19991025	AU 1999-31947	19990326 <--
	AU 740586	B2	20011108		
	BR 9910113	A	20001226	BR 1999-10113	19990326 <--
	EP 1069913	A1	20010124	EP 1999-913997	19990326 <--
	EP 1069913	B1	20030723		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	TR 200002848	T2	20010221	TR 2000-200002848	19990326 <--
	NZ 506921	A	20020201	NZ 1999-506921	19990326 <--
	JP 2002510654	T2	20020409	JP 2000-542043	19990326 <--
	AT 245451	E	20030815	AT 1999-913997	19990326 <--
	PT 1069913	T	20031128	PT 1999-913997	19990326 <--
	CN 1133466	B	20040107	CN 1999-804558	19990326 <--
	ES 2203103	T3	20040401	ES 1999-913997	19990326 <--
	ZA 2000004413	A	20010522	ZA 2000-4413	20000825 <--
	HK 1031335	A1	20040121	HK 2001-102143	20010324 <--
PRAI	US 1998-81004P	P	19980407	<--	
	WO 1999-US6106	W	19990326	<--	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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WO 9951273	ICM	A61K047-36
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AB **Ophthalmic** drug delivery vehicles which are administrable as a liquid and which gel upon contact with the **eye** are disclosed. The vehicles contain xanthan gum (I). An **ophthalmic** composition contained timolol maleate 0.34, benzododecinium bromide 0.012, I 0.6, tromethamine 0.72, boric acid 0.3, mannitol 4.35, Polysorbate 80 0.05, and

water q.s. 100%.

ST **ophthalmic** gel xanthan gum timolol

IT pH  
(adjusting agents; gelling **ophthalmic** compns. containing xanthan gum)

IT Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(alkylbenzyl dimethyl, chlorides; gelling **ophthalmic** compns. containing xanthan gum)

IT Cosmetics  
(emollients; gelling **ophthalmic** compns. containing xanthan gum)

IT Allergy inhibitors  
Anti-infective agents  
Antiglaucoma agents  
Buffers  
Immunosuppressants  
Lubricants  
Preservatives  
Solubilizers  
Stabilizing agents  
Surfactants  
(gelling **ophthalmic** compns. containing xanthan gum)

IT Growth factors, animal  
Steroids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(gelling **ophthalmic** compns. containing xanthan gum)

IT Drug delivery systems  
(gels, **ophthalmic**; gelling **ophthalmic** compns. containing xanthan gum)

IT Anti-inflammatory agents  
(nonsteroidal; gelling **ophthalmic** compns. containing xanthan gum)

IT Anti-inflammatory agents  
(steroidal; gelling **ophthalmic** compns. containing xanthan gum)

IT 50-70-4, Sorbitol, biological studies 69-65-8, Mannitol 77-86-1  
7281-04-1, Benzododecinium bromide 9005-65-6, Polysorbate 80  
10043-35-3, Boric acid, biological studies 11138-66-2, Xanthan gum  
26839-75-8, Timolol 26921-17-5, Timolol maleate 32986-56-4, Tobramycin  
49697-38-3, Rimexolone 51781-06-7, Carteolol 59803-98-4, Brimonidine  
63659-19-8, Betaxolol hydrochloride 85721-33-1, Ciprofloxacin  
113806-05-6, Olopatadine 116209-55-3, (S)-Betaxolol hydrochloride  
130209-82-4, Latanoprost 135646-98-9,  
15-Ketolatanoprost 140462-76-6, Olopatadine hydrochloride  
246145-93-7  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(gelling **ophthalmic** compns. containing xanthan gum)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Carrington, S; POLYMER 1996, V37(13), P2871 HCAPLUS  
(2) Colgate Palmolive Co; EP 0331617 A 1989 HCAPLUS  
(3) Lin, S; US 4136177 A 1979 HCAPLUS  
(4) Nolte, H; CARBOHYDRATE POLYMERS 1992, V18(4), P243 HCAPLUS  
(5) Shatwell, K; CARBOHYDRATE RESEARCH 1990, V206(1), P87 HCAPLUS

IT 9005-65-6, Polysorbate 80 130209-82-4,  
Latanoprost 135646-98-9, 15-Ketolatanoprost  
246145-93-7  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(gelling **ophthalmic** compns. containing xanthan gum)

RN 9005-65-6 HCAPLUS

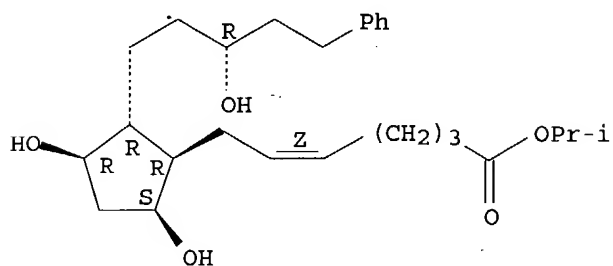
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
(9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 130209-82-4 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

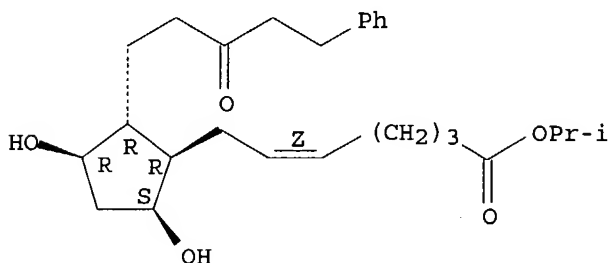
Absolute stereochemistry.  
Double bond geometry as shown.



RN 135646-98-9 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxo-5-phenylpentyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

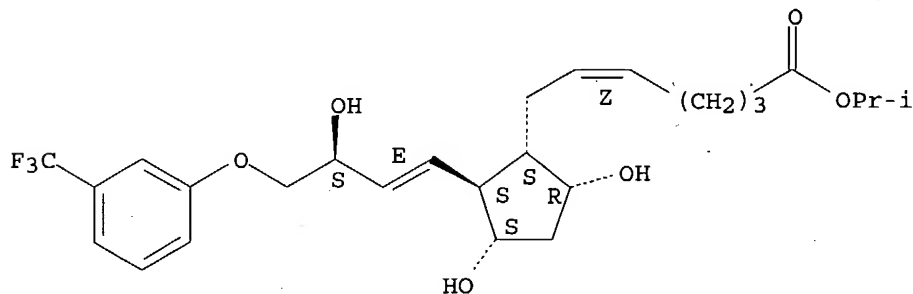
Absolute stereochemistry.  
Double bond geometry as shown.



RN 246145-93-7 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(1E,3R)-3-hydroxy-4-[3-(trifluoromethyl)phenoxy]-1-butenyl]cyclopentyl]-, 1-methylethyl ester, (5Z)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
Double bond geometry as shown.



DN 129:321195  
 ED Entered STN: 06 Nov 1998  
 TI Thermally gelling emulsions comprising cellulose ethers  
 IN Kabra, Bhagwati P.  
 PA Alcon Laboratories, Inc., USA  
 SO U.S., 6 pp., Cont.-in-part of U.S. 5,618,800.  
 CODEN: USXXAM

DT Patent  
 LA English  
 IC ICM A61K031-715  
 ICS A01N043-04; C08B011-00; C08B011-08  
 NCL 514057000  
 CC 63-6 (Pharmaceuticals)  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5827835	A	19981027	US 1996-758787	19961203 <--
	US 5618800	A	19970408	US 1995-518289	19950823 <--
PRAI	US 1994-298244	B2	19940830	<--	
	US 1995-518289	A2	19950823	<--	

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 5827835	ICM	A61K031-715
	ICS	A01N043-04; C08B011-00; C08B011-08
	NCL	514057000

AB Thermally gelling emulsion compns. which reversibly increase in either loss modulus or storage modulus, or both, upon contact with the eye, skin, mucous membrane or body cavity are disclosed. The emulsion compns. contain one or more nonionic substituted cellulose ethers and do not require a charged surfactant or a pH-sensitive polymer for such increase in loss modulus or storage modulus, or both, upon administration. In one embodiment, the compns. gel upon instillation in the eye. Thus, 0.3 g of methylethyl cellulose (I), 0.35 g of mannitol, 0.3 g of boric acid, and 0.066 g of tromethamine were combined with enough water to give 9.5 g of a composition I was hydrated by stirring the solution in an ice bath for 2 h. To this stirred composition, 0.5 g of Myritol 318 (caprylic/capric triglyceride) was added and the resulting mixture was stirred for fifteen minutes at room temperature to produce an emulsion.

ST thermal gelling pharmaceutical emulsion cellulose ether

IT Fats and Glyceridic oils, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (animal; thermally gelling emulsions comprising cellulose ethers)

IT Drug delivery systems  
 (emulsions; thermally gelling emulsions comprising cellulose ethers)

IT Fatty acids, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (esters; thermally gelling emulsions comprising cellulose ethers)

IT Castor oil  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (ethoxylated; thermally gelling emulsions comprising cellulose ethers)

IT Antihypertensives  
 (post-surgical; thermally gelling emulsions comprising cellulose ethers)

IT Fats and Glyceridic oils, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (sesame; thermally gelling emulsions comprising cellulose ethers)

IT Anti-inflammatory agents  
 (steroidal and non-steroidal; thermally gelling emulsions comprising cellulose ethers)

IT Allergy inhibitors  
 Anti-infective agents  
 Antiglaucoma agents

Dopamine agonists  
 Emulsifying agents  
 Immunosuppressants  
 Surfactants  
 (thermally gelling emulsions comprising cellulose ethers)

IT Corn oil

Growth factors, animal

Hydrocarbon oils

Phospholipids, biological studies

Prostaglandins

Proteins, general, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(thermally gelling emulsions comprising cellulose ethers)

IT Fats and Glyceridic oils, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(vegetable; thermally gelling emulsions comprising cellulose ethers)

IT 124-07-2D, Caprylic acid, triglycerides 334-48-5D, Capric acid, triglycerides 9002-96-4 9003-11-6, Polyethylene oxide polypropylene oxide copolymer 9004-58-4, Ethylhydroxyethylcellulose. 9004-59-5, Methylethylcellulose 9005-65-6, Polyoxyethylene sorbitan monooleate 25301-02-4, Oxyethylated tertiary octylphenol formaldehyde polymer

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(thermally gelling emulsions comprising cellulose ethers)

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Anon; EP 0227494 B1 1987 HCAPLUS

(2) Anon; WO 8911503 1989 HCAPLUS

(3) Anon; WO 9209307 1992 HCAPLUS

(4) Anon; JP WO9423750 1994

(5) Ansmann; US 4798682 1989 HCAPLUS

(6) Carlsson; US 5279660 1994 HCAPLUS

(7) Carlsson; Colloids and Surfaces 1990, V47, P147 HCAPLUS

(8) Chang; US 5296228 1994 HCAPLUS

(9) Clement; US 5208028 1993 HCAPLUS

(10) Davis; US 5192535 1993 HCAPLUS

(11) Greminger; Chapter XXVIII 1973, P619 HCAPLUS

(12) Haslam; US 4474751 1984 HCAPLUS

(13) Haslam; US 4474752 1984 HCAPLUS

(14) Henry; US 5126141 1992 HCAPLUS

(15) Hoeg; US 5441732 1995 HCAPLUS

(16) Joshi; US 5252318 1993 HCAPLUS

(17) Jullander; Acta Chemica Scandinavica 1955, V9, P1291 HCAPLUS

(18) Krezanoski; US 4188373 1980 HCAPLUS

(19) Lin; US 4136177 1979 HCAPLUS

(20) Lin; US 4136178 1979 HCAPLUS

(21) Marlin; US 5358706 1994 HCAPLUS

(22) Mazuel; US 4861760 1989 HCAPLUS

(23) Missel; US 5212162 1993 HCAPLUS

(24) Phares; US 3608073 1971 HCAPLUS

(25) Pramoda; US 4136173 1979 HCAPLUS

(26) Safwat; J of Controlled Release 1994, V32, P259 HCAPLUS

(27) Sarkar; US 4001211 1977 HCAPLUS

(28) Sarkar; J of Applied Polymer Science 1979, V24, P1073 HCAPLUS

(29) Shimokawa; US 4708821 1987 HCAPLUS

(30) Viegas; US 5077033 1991 HCAPLUS

(31) Viegas; US 5124151 1992 HCAPLUS

(32) Viegas; US 5143731 1992 HCAPLUS

(33) Viegas; US 5306501 1994 HCAPLUS

(34) Viegas; US 5318780 1994 HCAPLUS

IT 9004-58-4, Ethylhydroxyethylcellulose. 9004-59-5, Methylethylcellulose 9005-65-6, Polyoxyethylene sorbitan monooleate



RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(thermally gelling emulsions comprising cellulose ethers)

RN 9004-58-4 HCAPLUS

CN Cellulose, ethyl 2-hydroxyethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 107-21-1

CMF C2 H6 O2

HO-CH<sub>2</sub>-CH<sub>2</sub>-OH

CM 3

CRN 64-17-5

CMF C2 H6 O

H<sub>3</sub>C-CH<sub>2</sub>-OH

RN 9004-59-5 HCAPLUS

CN Cellulose, ethyl methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 67-56-1

CMF C H4 O

H<sub>3</sub>C-OH

CM 3

CRN 64-17-5

CMF C2 H6 O

H<sub>3</sub>C-CH<sub>2</sub>-OH

RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
(9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L116 ANSWER 20 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:635653 HCAPLUS

DN 129:265480

ED Entered STN: 08 Oct 1998

TI Compositions and methods for reducing ocular hypertension

IN Reed, Kenneth Warren; Yen, Shau-fong; Sou, Mary; Peacock, Regina Flinn

PA Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft  
m.b.H.

SO PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K031-557

ICS A61K009-00

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9841208	A1	19980924	WO 1998-EP1483	19980313 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2280089	AA	19980924	CA 1998-2280089	19980313 <--
	AU 9870353	A1	19981012	AU 1998-70353	19980313 <--
	AU 738781	B2	20010927		
	EP 969846	A1	20000112	EP 1998-916948	19980313 <--
	EP 969846	B1	20040107		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LV, FI				
	BR 9808016	A	20000308	BR 1998-8016	19980313 <--
	EE 9900410	A	20000417	EE 1999-410	19980313 <--
	EE 4091	B1	20030815		
	NZ 337322	A	20010525	NZ 1998-337322	19980313 <--
	JP 2001515502	T2	20010918	JP 1998-540126	19980313 <--
	RU 2197970	C2	20030210	RU 1999-121641	19980313 <--
	AT 257385	E	20040115	AT 1998-916948	19980313 <--
	ZA 9802188	A	19980917	ZA 1998-2188	19980316 <--
	TW 527187	B	20030411	TW 1998-87103809	19980316 <--
	MX 9908471	A	20000228	MX 1999-8471	19990915 <--
	NO 9904481	A	19990916	NO 1999-4481	19990916 <--
PRAI	US 1997-819221	A	19970317	<--	
	WO 1998-EP1483	W	19980313	<--	

#### CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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WO 9841208	ICM	A61K031-557
	ICS	A61K009-00

AB Disclosed is an improved ophthalmic composition, including prostaglandin active agents, which is especially useful in lowering intraocular pressure (IOP) associated with glaucoma. Improvements in IOP reduction efficacy, preservative efficacy and reduced additive concns. are achieved by utilizing the disclosed compns. which include a prostaglandin

active agent (e.g., iso-Pr **unoprostone**, a metabolite of an F-series prostaglandin), in conjunction with selected non-ionic surfactants, preservatives, and non-ionic tonicity adjusting agents. An **eye** solution contained iso-Pr **unoprostone** 0.18, Polysorbate-80 0.7, Brij-97 0.3, benzalkonium chlorides 0.011, EDTA 0.02, mannitol 4.7, and distilled water to 100 %. Instillation of .apprx.30 µL of the solution into the **eye** of a rabbit resulted in the reduction of IOP to 86 % of the initial IOP.

- ST glaucoma prostaglandin **ophthalmic** soln; **intraocular**  
pressure redn **isopropylunoprostone** eye drop
- IT Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(alkylbenzyl dimethyl, chlorides; **ophthalmic** compns. containing  
prostaglandins with preservatives and tonicity-adjusting agents for  
reducing **ocular** hypertension)
- IT Antiglaucoma agents  
**Glaucoma (disease)**  
Preservatives  
Surfactants  
(**ophthalmic** compns. containing prostaglandins with preservatives  
and tonicity-adjusting agents for reducing **ocular**,  
hypertension)
- IT Esters, biological studies  
Phenols, biological studies  
Polyoxyalkylenes, biological studies  
**Prostaglandins**  
Quaternary ammonium compounds, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(**ophthalmic** compns. containing prostaglandins with preservatives  
and tonicity-adjusting agents for reducing **ocular**  
hypertension)
- IT Fatty acids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(salts, tall oil, sodium salts; **ophthalmic** compns. containing  
prostaglandins with preservatives and tonicity-adjusting agents for  
reducing **ocular** hypertension)
- IT Fatty acids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(sodium salts; **ophthalmic** compns. containing prostaglandins with  
preservatives and tonicity-adjusting agents for reducing **ocular**  
hypertension)
- IT Drug delivery systems  
(solns., **ophthalmic**; **ophthalmic** compns. containing  
prostaglandins with preservatives and tonicity-adjusting agents for  
reducing **ocular** hypertension)
- IT Fatty acids, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(tall-oil, sodium salts; **ophthalmic** compns. containing  
prostaglandins with preservatives and tonicity-adjusting agents for  
reducing **ocular** hypertension)
- IT 50-70-4, D-Sorbitol, biological studies 54-64-8, Thimerosal 55-56-1,  
Chlorhexidine 56-81-5, Glycerol, biological studies 57-09-0,  
Cetyltrimethylammonium bromide 57-15-8, Chlorbutanol 59-50-7,  
3-Methyl-4-chlorophenol 60-00-4, EDTA, biological studies 60-12-8,  
Phenylethyl alcohol 69-65-8, D-Mannitol 80-46-6, 4-tert-Amylphenol  
88-04-0, Chloroxylenol 90-43-7, 2-Phenylphenol 97-23-4, Dichlorphen  
98-54-4, 4-tert-Butylphenol 99-96-7D, p-Hydroxybenzoic acid, esters  
100-51-6, Benzylalcohol, biological studies 106-41-2, p-Bromophenol  
106-48-9, p-Chlorophenol 117-80-6, 2,3-Dichloro-1,4-naphthoquinone  
120-32-1, 2-Benzyl-4-chlorophenol 121-54-0, Benzethonium chloride  
122-99-6, Phenoxyethanol 123-03-5, Cetylpyridinium chloride 148-24-3,  
8-Hydroxyquinoline, biological studies 1331-61-9, Dodecylbenzene  
sulfonic acid ammonium salt 1405-20-5, Polymyxin B sulfate 3772-94-9,

Pentachlorophenyllaurate 3944-72-7, 1-Octane sulfonic acid 5964-24-9,  
 Thimerfonate sodium 9004-98-2, Brij 97 9005-65-6, Polysorbate  
 80 13081-16-8, 4-Chloro-2-pentylphenol 13347-42-7,  
 2-Cyclopentyl-4-chlorophenol 19379-90-9, Benzoxonium chloride  
 25155-19-5, Naphthalene sulfonic acid 25155-30-0, Dodecylbenzene  
 sulfonic acid sodium salt 25322-68-3, Polyethylene glycol 25322-69-4,  
 Polypropylene glycol 27177-77-1, Dodecylbenzene sulfonic acid potassium  
 salt 28757-47-3 67993-50-4 85721-33-1, Ciprofloxacin 88951-32-0  
**120373-24-2, Isopropyl unoprostone**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (ophthalmic compns. containing prostaglandins with preservatives  
 and tonicity-adjusting agents for reducing ocular  
 hypertension)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

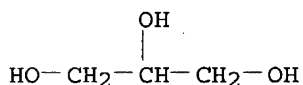
- RE  
 (1) Alcon Laboratories; WO 9530420 A 1995 HCAPLUS  
 (2) Allergan Inc; WO 9213836 A 1992 HCAPLUS  
 (3) Kabushiki Kaisha Ueno Seiyaku Oyo Kenkyujo; EP 0458587 A 1991 HCAPLUS  
 (4) Suketu, D; US 5558876 A 1996 HCAPLUS

IT 56-81-5, Glycerol, biological studies 9005-65-6,  
 Polysorbate 80 120373-24-2, **Isopropyl  
 unoprostone**

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (ophthalmic compns. containing prostaglandins with preservatives  
 and tonicity-adjusting agents for reducing ocular  
 hypertension)

RN 56-81-5 HCAPLUS

CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



RN 9005-65-6 HCAPLUS

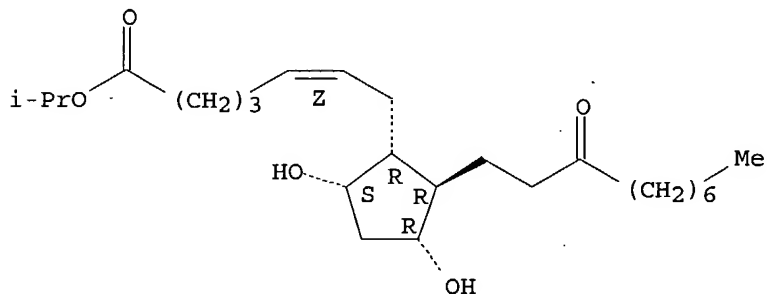
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
 (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 120373-24-2 HCAPLUS

CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



DN 129:166193  
 ED Entered STN: 21 Aug 1998  
 TI Therapeutic treatment and prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix  
 IN Setterstrom, Jean A.; Van Hamont, John E.; Reid, Robert H.; Jacob, Elliot; Jeyanthi, Ramasubbu; Boedeker, Edgar C.; McQueen, Charles E.; Tice, Thomas R.; Roberts, F. Donald; Friden, Phil  
 PA United States Dept. of the Army, USA; Van Hamont, John E.; et al.  
 SO PCT Int. Appl., 363 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K009-52  
 ICS A61K047-30  
 CC 63-5 (Pharmaceuticals)  
 Section cross-reference(s): 1, 2, 15  
 FAN.CNT 15

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9832427	A1	19980730	WO 1998-US1556	19980127 <--
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	US 6309669	B1	20011030	US 1997-789734	19970127 <--
	AU 9863175	A1	19980818	AU 1998-63175	19980127 <--
PRAI	US 1997-789734	A	19970127	<--	
	US 1984-590308	B1	19840316	<--	
	US 1992-867301	A2	19920410	<--	
	US 1995-446148	A2	19950522	<--	
	US 1995-446149	B2	19950522	<--	
	US 1996-590973	B2	19960124	<--	
	WO 1998-US1556	W	19980127	<--	

## CLASS

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 9832427	ICM	A61K009-52
		ICS	A61K047-30
AB	Novel burst-free, sustained release biocompatible and biodegradable microcapsules are disclosed which can be programmed to release their active core for variable durations ranging from 1-100 days in an aqueous physiol. environment. The microcapsules are comprised of a core of polypeptide or other biol. active agent encapsulated in a matrix of poly(lactide/glycolide) copolymer, which may contain a pharmaceutically acceptable adjuvant, as a blend of uncapped free carboxyl end group and end-capped forms ranging in ratios from 100/0 to 1/99.		
ST	infection microcapsule sustained release peptide copolymer		
IT	Hepatitis (B, chronic; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)		
IT	Hepatitis (C, chronic; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)		
IT	Trypanosoma cruzi (Chagas' disease from; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)		
IT	Immunoglobulins RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological		

study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)  
 (G, ampicillin-specific; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Nervous system  
 (Huntington's chorea; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents  
 (Kaposi's sarcoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Sperm  
 (acrosome, proteinase of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Diagnosis  
 (agents; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Ragweed (Ambrosia)  
 (allergy; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Ameba  
 (amebiasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antibiotics  
 (aminoglycoside; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Absidia ramosa  
 Actinobacillus equuli  
 Actinobacillus seminis  
 Arcanobacterium pyogenes  
 Aspergillus fumigatus  
 Babesia caballi  
 Brucella melitensis  
 Campylobacter fetus  
 Campylobacter fetus intestinalis  
 Candida albicans  
 Candida tropicalis  
 Chlamydia psittaci  
 Clostridium tetani  
 Equid herpesvirus 1  
 Equine arteritis virus  
 Escherichia coli  
 Gardnerella vaginalis  
 Human herpesvirus 1  
 Human herpesvirus 2  
 Leptospira interrogans pomona  
 Listeria monocytogenes  
 Mycobacterium tuberculosis  
 Mycoplasma bovis  
 Mycoplasma hominis  
 Neisseria gonorrhoeae  
 Pneumocystis carinii  
 Pseudomonas aeruginosa  
 Rhodococcus equi  
 Salmonella abortusequina  
 Salmonella abortusovis  
 Streptococcus group B  
 Toxoplasma gondii  
 Treponema pallidum  
 Trichomonas vaginalis  
 Tritrichomonas foetus  
 Trypanosoma equiperdum

(antigens of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Mycobacterium  
(antimycobacterial agents; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Mouth  
(aphthous ulcer; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drugs  
(appetite stimulants; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Heart, disease  
(arrhythmia; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Blood vessel  
(artificial, infections surrounding; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Dermatitis  
(atopic; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Babesia  
(babesiasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Skin, neoplasm  
(basal cell carcinoma, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents  
Skin, neoplasm  
(basal cell carcinoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Natural products, pharmaceutical  
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(belladonna; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Prostate gland  
(benign hyperplasia; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Polymers, biological studies  
RL: DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(biodegradable; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Nervous system  
(central, disease; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Polymers, biological studies  
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(co-; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Intestine, disease  
(colitis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antigens  
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(colony factor; prevention of infections with bioactive material

encapsulated within biodegradable-biocompatible polymeric matrix)

IT Intestine, neoplasm  
(colorectal, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents  
Intestine, neoplasm  
(colorectal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Thrombosis  
(coronary arterial; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Artery, disease  
(coronary, thrombosis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Vasodilators  
(coronary; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Tapeworm (Cestoda)  
(cysticercosis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Bladder  
(cystitis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Mental disorder  
(depression; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Eye, disease  
(diabetic retinopathy; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Polyesters, biological studies  
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(dilactone-based; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Digestive tract  
(drugs for; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Brain, disease  
(edema, peritumoral; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems  
(emulsions; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT B cell (lymphocyte)  
T cell (lymphocyte)  
(epitopes of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Alkaloids, biological studies  
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(ergot; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Amino acids, biological studies  
Fats and Glyceridic oils, biological studies  
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(essential; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)



IT Fasciola  
(fascioliasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Filaria  
(filariasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Anthelmintics  
(filaricides; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Digestive tract  
(gastroenteritis, virus causing; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Intestine, disease  
(giardiasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Transplant and Transplantation  
(graft-vs.-host reaction; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Calymmatobacterium granulomatis  
(granuloma inguinale from, antigens of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antigens  
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(hepatitis B surface; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Liver, neoplasm  
(hepatoma, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents  
Liver, neoplasm  
(hepatoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Human herpesvirus 2  
(herpes genitalis from; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Human herpesvirus 3  
(herpes zoster from, antigens of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Parvovirus  
Retroviridae  
(human; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Globulins, biological studies  
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(hyperimmune; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Sexual behavior  
(impotence; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT **Eye, disease**  
Mouth  
Skin, disease  
(infection; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Prosthetic materials and Prosthetics  
(infections surrounding; prevention of infections with bioactive

material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems  
(inhalants; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Fertility  
Ovary, neoplasm  
Pancreas, neoplasm  
(inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems  
(injections; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Diabetes mellitus  
(insulin-dependent; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Leishmania  
(leishmaniasis from, visceral; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents  
(lung small-cell carcinoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antibiotics  
(macrolide; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents  
(mammary gland; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents  
(melanoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems  
(microcapsules; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems  
(microspheres; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems  
(nasal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Mammary gland  
Prostate gland  
(neoplasm, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Mammary gland  
Prostate gland  
(neoplasm; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Meningitis  
(neoplastic; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Angiogenesis  
(neovascularization, retinal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Diabetes mellitus  
(non-insulin-dependent; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Anti-inflammatory agents  
(nonsteroidal; prevention of infections with bioactive material

encapsulated within biodegradable-biocompatible polymeric matrix)

IT Emulsions  
(oil-in-water; prevention of infections with bioactive material  
encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems  
(oral; prevention of infections with bioactive material encapsulated  
within biodegradable-biocompatible polymeric matrix)

IT Nitrites  
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV  
(Device component use); PRP (Properties); THU (Therapeutic use); BIOL  
(Biological study); PROC (Process); USES (Uses)  
(organic; prevention of infections with bioactive material encapsulated  
within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents  
(ovary; prevention of infections with bioactive material encapsulated  
within biodegradable-biocompatible polymeric matrix)

IT Antitumor agents  
(pancreas; prevention of infections with bioactive material  
encapsulated within biodegradable-biocompatible polymeric matrix)

IT Anxiety  
(panic disorder; prevention of infections with bioactive material  
encapsulated within biodegradable-biocompatible polymeric matrix)

IT Paragonimus  
(paragonimiasis; prevention of infections with bioactive material  
encapsulated within biodegradable-biocompatible polymeric matrix)

IT Hormones, animal, biological studies  
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV  
(Device component use); PRP (Properties); THU (Therapeutic use); BIOL  
(Biological study); PROC (Process); USES (Uses)  
(peptide; prevention of infections with bioactive material encapsulated  
within biodegradable-biocompatible polymeric matrix)

IT Periodontium  
(periodontitis; prevention of infections with bioactive material  
encapsulated within biodegradable-biocompatible polymeric matrix)

IT Mental disorder  
(phobia; prevention of infections with bioactive material encapsulated  
within biodegradable-biocompatible polymeric matrix)

IT Adhesion, biological  
(postsurgical; prevention of infections with bioactive material  
encapsulated within biodegradable-biocompatible polymeric matrix)

IT AIDS (disease)  
Acinetobacter  
Actinomycetales  
Adenoviridae  
Adrenoceptor agonists  
Aerococcus  
Aeromonas  
Allergy inhibitors  
Alzheimer's disease  
Analgesics  
Anesthetics  
Angiogenesis  
Angiogenesis inhibitors  
Anthelmintics  
Anti-infective agents  
Anti-inflammatory agents  
Antiarrhythmics  
Antiarthritics  
Antibacterial agents  
Antibiotics  
Anticholesteremic agents  
Anticoagulants  
Anticonvulsants

Antidepressants  
Antidiabetic agents  
Antidiarrheals  
Antiemetics  
Antihistamines  
Antihypertensives  
Antimalarials  
Antimigraine agents  
Antiparkinsonian agents  
Antipyretics  
Antirheumatic agents  
Antiserums  
Antitumor agents  
Antitussives  
Antiulcer agents  
Antiviral agents  
Appetite depressants  
Arbovirus  
Arcanobacterium haemolyticum  
Arenavirus  
Asthma  
Bacillus (bacterium genus)  
Biocompatibility  
Blood substitutes  
Bordetella  
Borrelia  
Bronchodilators  
Brucella  
Cachexia  
Calymmatobacterium  
Campylobacter  
Cardiopulmonary bypass  
Cardiotonics  
Cardiovascular agents  
Cholinergic agonists  
Clostridium  
Contraceptives  
Coronavirus  
Corynebacterium  
Cryptosporidium parvum  
Cystic fibrosis  
Cytomegalovirus  
Cytotoxic agents  
Decongestants  
Diagnosis  
Diarrhea  
Dissolution rate  
Diuretics  
Drug bioavailability  
Drug dependence  
Ebola virus  
Echinococcus  
Electrolytes, biological  
Emulsifying agents  
Enterobacteriaceae  
Enterococcus  
Enterovirus  
Epitopes  
Erysipelothrix  
Expectorants  
Filovirus  
Flavobacterium  
Freeze drying

Fungicides  
Gardnerella  
Gram-negative bacteria  
Gram-positive bacteria (Firmicutes)  
Haemophilus  
Haemophilus ducreyi  
Helicobacter  
Hepatitis A virus  
Hepatitis B virus  
Hepatitis C virus  
Human herpesvirus 3  
Human herpesvirus 4  
Human immunodeficiency virus  
Human immunodeficiency virus 1  
Human parainfluenza virus  
Human poliovirus  
Hypercholesterolemia  
Hypnotics and Sedatives  
Immunization  
Immunomodulators  
Immunostimulants  
Infection  
Influenza virus  
Kidney, disease  
Lactococcus  
Legionella  
Leptospira  
Leuconostoc  
Listeria  
Measles virus  
Melanoma  
Micrococcus  
Molluscum contagiosum virus  
Moraxella  
Multiple sclerosis  
Mumps virus  
Muscle relaxants  
Narcotics  
Neisseria  
Nervous system agents  
Nutrients  
Opioid antagonists  
Osteoarthritis  
Osteomyelitis  
Osteoporosis  
Ovary, neoplasm  
Pancreas, neoplasm  
Papillomavirus  
Parasitocides  
Parkinson's disease  
Pediococcus  
Planococcus (bacterium)  
Plesiomonas  
Pneumonia  
Poxviridae  
Pseudomonas  
Psoriasis  
Psychotropics  
Rabies virus  
Reoviridae  
Respiratory syncytial virus  
Rheumatoid arthritis  
Rhinovirus

Rhodococcus  
 Rotavirus  
 Rothia (bacterium)  
 Rubella virus  
 Salmonella typhi  
 Sexually transmitted diseases  
 Shigella boydii  
 Shigella dysenteriae  
 Shigella flexneri  
 Shigella sonnei  
 Spirillum  
 Staphylococcus  
 Streptobacillus  
 Streptococcus  
 Thrombosis  
 Tranquilizers  
 Treponema  
 Vaccines  
 Vasodilators  
 Vibrio  
 Vibrio cholerae  
 Wolinella succinogenes  
 Yersinia  
 (prevention of infections with bioactive material encapsulated within  
 biodegradable-biocompatible polymeric matrix)  
 IT Alkaloids, biological studies  
 Antibodies  
 Antigens  
 Enzymes, biological studies  
 Estrogens  
 Glycolipids  
 Glycopeptides  
 Growth factors, animal  
 Lipopolysaccharides  
 Peptides, biological studies  
 Pheromones, animal  
 Progestogens  
 Prostaglandins  
 Proteins, general, biological studies  
 Steroids, biological studies  
 Sulfonamides  
 Tetracyclines  
 Vitamins  
 RL: BPR (Biological process); BSU (Biological study, unclassified); DEV  
 (Device component use); PRP (Properties); THU (Therapeutic use); BIOL  
 (Biological study); PROC (Process); USES (Uses)  
 (prevention of infections with bioactive material encapsulated within  
 biodegradable-biocompatible polymeric matrix)  
 IT Drug delivery systems  
 (prodrugs; prevention of infections with bioactive material  
 encapsulated within biodegradable-biocompatible polymeric matrix)  
 IT Proliferation inhibition  
 (proliferation inhibitors; prevention of infections with bioactive  
 material encapsulated within biodegradable-biocompatible polymeric  
 matrix)  
 IT Antitumor agents  
 (prostate gland; prevention of infections with bioactive material  
 encapsulated within biodegradable-biocompatible polymeric matrix)  
 IT Pilus  
 (proteins; prevention of infections with bioactive material  
 encapsulated within biodegradable-biocompatible polymeric matrix)  
 IT Scalp  
 (psoriasis of; prevention of infections with bioactive material

- encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Drug delivery systems  
(rectal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Artery, disease  
(restenosis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Eye, disease  
(retina, neovascularization; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Schistosoma  
(schistosomiasis from; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Lung, neoplasm  
(small-cell carcinoma, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Lung, neoplasm  
(small-cell carcinoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Muscle relaxants  
(spasmolytics; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Contraceptives  
(spermicidal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Brain, disease  
(spongiform encephalopathy, agent causing; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Appetite  
(stimulants; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Brain, disease  
(stroke; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Strongylus  
(strongylodiasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Drug delivery systems  
(sustained-release, programmable; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Osteoporosis  
(therapeutic agents; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Bile  
(therapy with; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Drug delivery systems  
(topical; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Muscle, disease  
(torticollis, spasmodic; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Toxocara  
(toxocariasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Toxoplasma gondii  
(toxoplasmosis from; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems  
(transdermal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Head  
(trauma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Trichinella  
(trichinellosis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Trichomonas  
(trichomoniasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems  
(vaginal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Emulsions  
(water-in-oil; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT **Lactams**  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
( $\beta$  -, **antibiotics**; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT 9002-72-6, Somatotropin  
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)  
(deficiency; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT 9005-49-6, Heparin, biological studies  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(neutralization of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT 9001-60-9, Lactate dehydrogenase 37326-33-3, Hyaluronidase  
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(of sperm; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT 50-06-6, Phenobarbital, biological studies 50-12-4, Mephentyoin  
50-18-0, Cyclophosphamide 50-23-7, Hydrocortisone 50-24-8, Prednisolone 50-28-2,  $17\beta$ -Estradiol, biological studies 50-33-9, Phenylbutazone, biological studies 50-52-2, Thioridazine 50-55-5, Reserpine 50-78-2, Aspirin 51-55-8, Atropine, biological studies 52-24-4, Thiotepe 52-76-6, Lynestrenol 53-03-2, Prednisone 53-16-7, Estrone, biological studies 53-86-1, Indomethacin 54-11-5, Nicotine 55-48-1, Atropine sulfate 55-63-0, Nitroglycerin 55-86-7, Nitrogen mustard 56-53-1, Diethyl stilbestrol 56-75-7, Chloramphenicol 57-27-2, Morphine, biological studies 57-33-0, Sodium pentobarbital 57-42-1, Meperidine 57-53-4, Meproamate 57-63-6, Ethinyl estradiol 57-85-2, Testosterone propionate 57-92-1, Streptomycin a, biological studies 58-08-2, Caffeine, biological studies 58-14-0, Pyrimethamine 58-22-0 58-25-3, Chlordiazepoxide 58-39-9, Perphenazine 58-73-1, Diphenhydramine 59-01-8, Kanamycin a 59-05-2, Methotrexate 59-92-7, L-Dopa, biological studies 61-33-6, Penicillin g, biological studies 67-20-9, Nitrofurantoin 68-22-4, Norethisterone 68-23-5, Norethynodrel 69-09-0, Chlorpromazine hydrochloride 69-53-4, Ampicillin 69-72-7D, Salicylic acid, derivs. 71-58-9, Medroxyprogesterone acetate 72-33-3, Mestranol 76-57-3, Codeine 79-57-2, Oxytetracycline 79-64-1, Dimethisterone 91-81-6, Tripeleminamine 103-90-2, Acetaminophen 113-15-5, Ergotamine 114-07-8, Erythromycin 114-49-8, Hyoscine hydrobromide 121-54-0 122-09-8, Phentermine 125-29-1, Dihydrocodeinone 125-71-3, Dextromethorphan 127-48-0, Trimethadione 128-62-1, Noscapine 145-94-8, Chlorindanol 148-82-3, Melphalan



155-41-9, Methscopolamine bromide 288-32-4D, Imidazole, derivs.  
 297-76-7, Ethynodiol diacetate 302-22-7, Chlormadinone acetate  
 305-03-3, Chlorambucil 309-43-3, Sodium secobarbital 315-30-0,  
 Allopurinol 434-03-7, Ethisterone 439-14-5, Diazepam 443-48-1,  
 Metronidazole 469-62-5 471-34-1, Calcium carbonate, biological studies  
 497-19-8, Sodium carbonate, biological studies 523-87-5, Dimenhydrinate  
 546-93-0, Magnesium carbonate 578-66-5D, 8-Aminoquinoline, derivs.  
 578-68-7D, 4-Aminoquinoline, derivs. 595-33-5, Megestrol acetate  
 738-70-5, Trimethoprim 846-50-4, Temazepam 1397-89-3, Amphotericin b  
 1397-94-0, Antimycin a 1403-66-3, Gentamicin 1404-26-8, Polymyxin b  
 1404-90-6, Vancomycin 1406-05-9D, Penicillin, derivs. 4696-76-8,  
 Kanamycin b 5588-33-0, Mesoridazine 5633-18-1, Melengestrol  
 5786-21-0, Clozapine 5800-19-1, Metiapine 6533-00-2, Norgestrel  
 7447-40-7, Potassium chloride (KCl), biological studies 8063-07-8,  
 Kanamycin 9000-83-3, Atpase 9000-92-4, Amylase 9001-62-1, Lipase  
 9001-63-2, Muramidase 9001-67-6, Neuraminidase 9001-78-9, Alkaline  
 phosphatase 9001-99-4, Ribonuclease 9002-02-2, Succinic acid  
 dehydrogenase 9002-07-7, Trypsin 9004-07-3, Chymotrypsin 9004-10-8,  
 Insulin, biological studies 9025-82-5, Phosphodiesterase 9029-12-3,  
 Glutamic acid dehydrogenase 9035-74-9, Glycogen phosphorylase  
 9046-27-9,  $\gamma$ -Glutamyltranspeptidase 9079-67-8 10118-90-8,  
 Minocycline 11111-12-9, Cephalosporins 13292-46-1, Rifampin  
 14271-04-6 21645-51-2, Aluminum hydroxide, biological studies  
 22232-71-9, Mazindol 24730-10-7, Dihydroergocristine methanesulfonate  
 25447-66-9 26780-50-7, Poly(lactide co-glycolide) 26787-78-0,  
 Amoxicillin 30516-87-1, Azt 32986-56-4, Tobramycin 35189-28-7,  
 Norgestimate 37205-61-1, Proteinase inhibitor 37517-28-5, Amikacin  
 53678-77-6D, Muramyl dipeptide, derivs. 53994-73-3, Cefaclor  
 55268-75-2, Cefuroxime 61036-62-2, Teicoplanin 64221-86-9, Imipenem  
 80738-43-8, Lincosamide 81103-11-9, Clarithromycin 82419-36-1,  
 Ofloxacin 85721-33-1, Ciprofloxacin

RL: BPR (Biological process); BSU (Biological study, unclassified); DEV  
 (Device component use); PRP (Properties); THU (Therapeutic use); BIOL  
 (Biological study); PROC (Process); USES (Uses)

(prevention of infections with bioactive material encapsulated within  
 biodegradable-biocompatible polymeric matrix)

IT 9002-60-2, Adrenocorticotropin, biological studies 9007-12-9, Calcitonin  
 9034-40-6, Lhrh 62229-50-9, Epidermal growth factor 115966-68-2,  
 Histatin 5 (human parotid saliva) 123781-17-9, Histatin 127716-52-3,  
 Histatin 9 (human parotid saliva) 146553-69-7 174270-18-9,  
 5-25-Histatin 6 (human parotid saliva) 186138-55-6 186138-60-3  
 194017-97-5 211118-03-5

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP  
 (Properties); THU (Therapeutic use); BIOL (Biological study); PROC  
 (Process); USES (Uses)

(prevention of infections with bioactive material encapsulated within  
 biodegradable-biocompatible polymeric matrix)

IT 9005-64-5, Tween 20 9005-65-6, Tween 80  
 9005-67-8, Tween 60 106392-12-5, Pluronic  
 RL: MOA (Modifier or additive use); PRP (Properties); THU (Therapeutic  
 use); BIOL (Biological study); USES (Uses)

(prevention of infections with bioactive material encapsulated within  
 biodegradable-biocompatible polymeric matrix)

IT 75-09-2, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (prevention of infections with bioactive material encapsulated within  
 biodegradable-biocompatible polymeric matrix)

IT 146553-70-0 146553-71-1 146553-72-2 146553-73-3 146553-74-4  
 146553-75-5 146553-76-6 146553-77-7 146553-78-8 146553-81-3  
 146553-82-4 146553-83-5 146553-85-7 146553-86-8 146553-87-9  
 146553-88-0 146553-89-1 146553-90-4 146553-91-5 146553-92-6  
 164583-46-4 164583-50-0 164583-51-1 211118-14-8 211118-17-1

RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)

(prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Jeyanthi; Proceedings International Symposium on Controlled Release of Bioactive Materials 1996, P351 HCAPLUS
- (2) Oppenheim; US 5486503 A 1996 HCAPLUS
- (3) Syntex U S AInc; EP 0052510 B2 1994 HCAPLUS
- (4) Wang; J of Controlled Release 1991, V17, P23 HCAPLUS
- (5) Yan; J of Controlled Release 1994, V32(3), P231 HCAPLUS
- (6) Yeh; A Novel Emulsification-Solvent Extraction Technique for Production of Protein Loaded Biodegradable Microparticles for Vaccine and Drug Delivery 1995, V33(3), P437 HCAPLUS

IT 9005-64-5, Tween 20 9005-65-6, Tween 80

9005-67-8, Tween 60

RL: MOA (Modifier or additive use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

RN 9005-64-5 HCAPLUS

CN Sorbitan, monododecanoate, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 9005-65-6 HCAPLUS

CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 9005-67-8 HCAPLUS

CN Sorbitan, monooctadecanoate, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L116 ANSWER 22 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:197383 HCAPLUS

DN 128:275079

ED Entered STN: 06 Apr 1998

TI Pharmaceutical composition forming a gel

IN Carlfors, Johan; Lindell, Katarina

PA Carlfors, Johan, Swed.; Lindell, Katarina

SO PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K009-00

ICS A61K047-48; A61K047-36; A61K047-38

CC 63-6 (Pharmaceuticals)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9811874	A1	19980326	WO 1997-SE1592	19970922 <--
	W: AU, CA, CN, JP, KR, RU, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	SE 9603480	A	19980324	SE 1996-3480	19960923 <--
	AU 9744077	A1	19980414	AU 1997-44077	19970922 <--
	JP 2001501194	T2	20010130	JP 1998-514594	19970922 <--
PRAI	SE 1996-3480	A	19960923	<--	
	WO 1997-SE1592	W	19970922	<--	

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

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WO 9811874            ICM        A61K009-00  
                          ICS        A61K047-48; A61K047-36; A61K047-38

AB    An in situ gel forming pharmaceutical composition for local administration to a target organ in the body, said composition essentially consisting of a water solution containing one or more aggregate forming surfactants, one or more gel forming water soluble polymers, a drug and optionally excipients, said drug having lipophilic properties, as it binds stronger to the aggregates of surfactants than to water, whereby its release from the in situ forming gel to the target organ occurs slowly. A composition was prepared containing **latanoprost** 200 µg, Et hydroxyethyl cellulose 40 mg, cetyltrimethylammonium bromide 13 mg and water to 4g.

ST    pharmaceutical gel; ethyl hydroxyethyl cellulose pharmaceutical gel

IT    Quaternary ammonium compounds, biological studies  
       RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
       (alkylbenzylidimethyl, chlorides; pharmaceutical composition forming a gel)

IT    Drug delivery systems  
       (gels; pharmaceutical composition forming a gel)

IT    **Eye**  
       Lipophilicity  
       Nose  
       Preservatives  
       Surfactants  
       (pharmaceutical composition forming a gel)

IT    Betaines  
       Glycerides, biological studies  
       Phospholipids, biological studies  
       Polysaccharides, biological studies  
       RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
       (pharmaceutical composition forming a gel)

IT    Osmotic pressure  
       (regulators; pharmaceutical composition forming a gel)

IT    151-21-3, Sodium dodecyl sulfate, biological studies    8044-71-1, Cetrimide    9000-07-1, Carrageenan 9004-58-4, Ethyl hydroxyethyl cellulose    9004-61-9, Hyaluronic acid    9005-32-7, Alginic acid 9005-63-4D, Polyoxyethylene sorbitan, esters    12441-09-7D, Sorbitan, esters    54514-50-0    71010-52-1D, Gellan gum, deacetylated 75345-27-6, Polyquad  
       RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
       (pharmaceutical composition forming a gel)

IT    50-02-2, Dexamethasone    50-23-7, Hydrocortisone    69267-58-9, Timolol hydrochloride 130209-82-4, **Latanoprost**  
       RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
       (pharmaceutical composition forming a gel)

RE.CNT 3        THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Cabane, B; Macromolecules 1996, V29, P3188 HCAPLUS  
 (2) Goddard, E; J Soc Cosmet Chem 1990, V41, P23 HCAPLUS  
 (3) Katarina, E; International Journal of Pharmaceutics 1996, V137, P233

IT    9004-58-4, Ethyl hydroxyethyl cellulose 9005-63-4D, Polyoxyethylene sorbitan, esters  
       RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
       (pharmaceutical composition forming a gel)

RN    9004-58-4    HCAPLUS

CN    Cellulose, ethyl 2-hydroxyethyl ether (9CI)    (CA INDEX NAME)

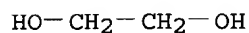
CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

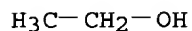
CM 2

CRN 107-21-1  
CMF C2 H6 O2



CM 3

CRN 64-17-5  
CMF C2 H6 O

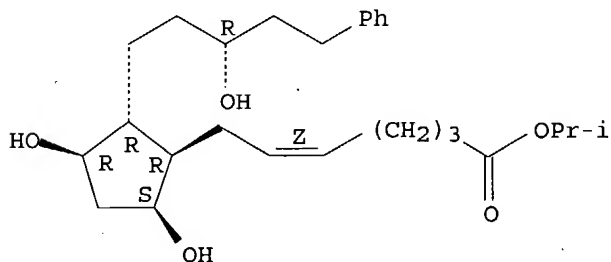


RN 9005-63-4 HCAPLUS  
CN Sorbitan, poly(oxy-1,2-ethanediyl) derivs. (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

IT 130209-82-4, Latanoprost  
RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (pharmaceutical composition forming a gel)  
RN 130209-82-4 HCAPLUS  
CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-[(3R)-3-hydroxy-5-phenylpentyl]cyclopentyl]-, 1-methylethyl ester, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L116 ANSWER 23 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:124046 HCAPLUS

DN 128:196684

ED Entered STN: 28 Feb 1998

TI Pharmaceutical compositions containing a reverse thermally  
viscosifying polymer network

IN Ron, Eyal S.; Bromberg, Lev; Orkisz, Michal; Kearney, Marie; Luczak,

Scott; Timm, Mary J.; Wrobel, Stanley J.  
 PA Gel Sciences, Inc., USA  
 SO PCT Int. Appl., 105 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K047-32  
 ICS A61K047-34  
 CC 63-6 (Pharmaceuticals)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9806438	A2	19980219	WO 1997-US13988	19970812 <--
	WO 9806438	A3	19980625		
	W: CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2263411	AA	19980219	CA 1997-2263411	19970812 <--
	EP 920338	A2	19990609	EP 1997-937165	19970812 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2000516614	T2	20001212	JP 1998-509898	19970812 <--
PRAI	US 1996-23996P	P	19960812	<--	
	US 1996-25974P	P	19960916	<--	
	US 1996-28183P	P	19961015	<--	
	US 1996-30798P	P	19961114	<--	
	US 1997-34174P	P	19970102	<--	
	US 1997-34454P	P	19970102	<--	
	WO 1997-US13988	W	19970812	<--	

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9806438	ICM	A61K047-32
	ICS	A61K047-34

AB A pharmaceutical composition includes a pharmaceutically acceptable carrier, comprising a reverse thermally **viscosifying** polymer network. The polymer network includes at least one responsive polymer component, said responsive component capable of aggregation in solution in response to an environmental stimulus and at least one structural component, said structural component exhibiting self-repulsive interactions over use conditions. The responsive component is randomly bonded to said structural component and the polymer network characterized in that it **viscosifies** in response to said environmental stimulus. The composition further includes a pharmaceutically active agent which imparts a pharmaceutical effect, said carrier and said agent disposed within an aqueous-based medium. The composition is suitable for administration of the pharmaceutical agent across dermal, otic, rectal, vaginal, **ophthalmic**, esophageal and nasal mucosal membranes. A composition was prepared from Pluronic F27 and poly(acrylic acid).

ST pharmaceutical polyoxyalkylene acrylate **viscosifying**

IT Alcohols, biological studies  
 RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (C16-18; pharmaceutical compns. containing a reverse thermally **viscosifying** polymer network)

IT Polyoxyalkylenes, biological studies  
 RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (acrylic; pharmaceutical compns. containing a reverse thermally **viscosifying** polymer network)

IT Polysiloxanes, biological studies  
 RL: MOA (Modifier or additive use); POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (di-Me, 3-hydroxypropyl Me, ethers with polyethylene-polypropylene

glycol acetate; pharmaceutical compns. containing a reverse thermally  
**viscosifying** polymer network)

IT Nervous system agents  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(miotics; pharmaceutical compns. containing a reverse thermally  
**viscosifying** polymer network)

IT Drug delivery systems  
(pharmaceutical compns. containing a reverse thermally **viscosifying**  
polymer network)

IT Polysiloxanes, biological studies  
RL: MOA (Modifier or additive use); POF (Polymer in formulation); PRP  
(Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(pharmaceutical compns. containing a reverse thermally **viscosifying**  
polymer network)

IT Adrenoceptor agonists  
Analgesics  
Anesthetics  
Antacids  
Anti-infective agents  
Antiemetics  
Antihistamines  
Antihypertensives  
Antipyretics  
Antitumor agents  
Antiulcer agents  
Antiviral agents  
Contraceptives  
Decongestants  
Diuretics  
Flavor  
Fungicides  
Hormones, animal, biological studies  
Laxatives  
Minerals, biological studies  
Muscarinic antagonists  
Parkinson's disease  
**Prostaglandins**  
Steroids, biological studies  
Tranquilizers  
Vaccines  
**Viscosity**  
Vitamins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(pharmaceutical compns. containing a reverse thermally  
**viscosifying** polymer network)

IT **Acrylic polymers, biological studies**  
RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use);  
BIOL (Biological study); USES (Uses)  
(polyoxyalkylene-; pharmaceutical compns. containing a reverse thermally  
**viscosifying** polymer network)

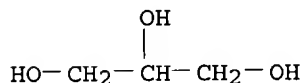
IT Muscle relaxants  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(spasmolytics; pharmaceutical compns. containing a reverse thermally  
**viscosifying** polymer network)

IT Contraceptives  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(spermicidal; pharmaceutical compns. containing a reverse thermally  
**viscosifying** polymer network)

IT Drug delivery systems  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(sprays; pharmaceutical compns. containing a reverse thermally  
**viscosifying** polymer network)

IT Adrenoceptor antagonists

- RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
( $\beta$ -; pharmaceutical compns. containing a reverse thermally  
**viscosifying** polymer network)
- IT 9001-03-0, Carbonic anhydrase  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(inhibitors; pharmaceutical compns. containing a reverse thermally  
**viscosifying** polymer network)
- IT 56-81-5, 1,2,3-Propanetriol, biological studies 67-63-0,  
Isopropanol, biological studies 77-92-9, Citric acid, biological studies  
81-13-0, Panthenol 139-33-3, Disodium EDTA 872-50-4, biological  
studies 7447-40-7, Potassium chloride, biological studies 9016-45-9  
9051-57-4, Rhodapex CO-436 12616-49-8, Plurafac C-17 26027-38-3,  
Nonoxynol 9 51410-72-1 74775-06-7, Crodamol PMP 81646-13-1  
84517-95-3, Germaben II  
RL: MOA (Modifier or additive use); POF (Polymer in formulation); PRP  
(Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(pharmaceutical compns. containing a reverse thermally **viscosifying**  
polymer network)
- IT 60621-84-3P  
RL: POF (Polymer in formulation); PRP (Properties); SPN (Synthetic  
preparation); THU (Therapeutic use); BIOL (Biological study); PREP  
(Preparation); USES (Uses)  
(pharmaceutical compns. containing a reverse thermally **viscosifying**  
polymer network)
- IT 9005-65-6, Tween 80 106392-12-5, Pluronic L122  
RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use);  
BIOL (Biological study); USES (Uses)  
(pharmaceutical compns. containing a reverse thermally **viscosifying**  
polymer network)
- IT 54182-58-0, Sucralfate  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(pharmaceutical compns. containing a reverse thermally **viscosifying**  
polymer network)
- IT 56-81-5, 1,2,3-Propanetriol, biological studies  
RL: MOA (Modifier or additive use); POF (Polymer in formulation); PRP  
(Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(pharmaceutical compns. containing a reverse thermally **viscosifying**  
polymer network)
- RN 56-81-5 HCAPLUS  
CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



- IT 9005-65-6, Tween 80  
RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use);  
BIOL (Biological study); USES (Uses)  
(pharmaceutical compns. containing a reverse thermally **viscosifying**  
polymer network)
- RN 9005-65-6 HCAPLUS  
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
(9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L116 ANSWER 24 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 1997:262698 HCAPLUS  
DN 126:321069  
ED Entered STN: 24 Apr 1997  
TI Thermally-gelling drug delivery vehicles containing cellulose ethers

IN Kabra, Bhagwati P.; Lang, John C.  
 PA Alcon Laboratories, Inc., USA  
 SO U.S., 9 pp., Cont.-in-part of U.S. Ser. No. 298,244, abandoned.  
 CODEN: USXXAM  
 DT Patent  
 LA English  
 IC ICM A61K031-715  
 ICS C08B011-02; C08B011-08  
 NCL 514057000  
 CC 63-5 (Pharmaceuticals)  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5618800	A	19970408	US 1995-518289	19950823 <--
	CA 2172373	AA	19960307	CA 1995-2172373	19950823 <--
	CA 2172373	C	19990316		
	CN 1134662	A	19961030	CN 1995-190826	19950823 <--
	ES 2162638	T3	20020101	ES 1995-931603	19950823 <--
	PT 725628	T	20020328	PT 1995-931603	19950823 <--
	TW 460288	B	20011021	TW 1995-84108938	19950828 <--
	US 5827835	A	19981027	US 1996-758787	19961203 <--
PRAI	US 1994-298244	B2	19940830	<--	
	US 1995-518289	A2	19950823	<--	

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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US 5618800	ICM	A61K031-715
	ICS	C08B011-02; C08B011-08
	NCL	514057000

AB Drug delivery vehicles which reversibly increase in either loss modulus or storage modulus, or both, upon contact with the eye, skin, mucous membrane or body cavity are disclosed. The vehicles contain one or more nonionic substituted cellulose ethers and do not require a charged surfactant or a pH-sensitive polymer for such increase in loss modulus or storage modulus, or both, upon administration. In one embodiment, the vehicles gel upon instillation in the eye. A solution containing methylcellulose 2.5, disodium hydrogen phosphate and anhydrous sodium phosphate monohydrate 1.3% was prepared having osmolality of 291 mOsm and pH = 7.3. The viscoelastic properties of the solution in pre-dose (25°) and post-dose (35°) states were measured. At the end of the isotherm at 25°, G', G'', and G\* values were about 4 Pa, 4 Pa, and 6 Pa resp. At the end of the isotherm at 35°, G', G'', G\* values were about 7 Pa, 4 Pa, 8 Pa resp. Thus increasing temperature from 25°-35°, this solution did not gel and did not show a significant increase in storage modulus even though it contained an amount of phosphate salts sufficient to raise the osmolality of the solution to 293 mOsm.

ST drug delivery vehicle gelling cellulose ether

IT Glaucoma (disease)

(inhibitors; thermally-gelling drug delivery vehicles containing cellulose ethers)

IT Allergy inhibitors

Anti-inflammatory agents

Antibacterial agents

Antihypertensives

Dopamine agonists

Drug delivery systems

Immunosuppressants

(thermally-gelling drug delivery vehicles containing cellulose ethers)

IT Growth factors, animal

Prostaglandins

Proteins, general, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)



(thermally-gelling drug delivery vehicles containing cellulose ethers)  
IT 3812-32-6, Carbonate ion, biological studies 7558-79-4, Dibasic sodium  
phosphate 9004-34-6D, Cellulose, ethers, biological studies  
9004-59-5, Methylcellulose 9004-62-0, Hydroxyethyl  
cellulose 9004-67-5, Methyl cellulose 10049-21-5, Monosodium  
phosphate monohydrate 12258-53-6 14265-44-2, Phosphate, biological  
studies 16887-00-6, Chloride ion, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(thermally-gelling drug delivery vehicles containing cellulose ethers)  
IT 9004-34-6D, Cellulose, ethers, biological studies 9004-59-5\*\*  
\* , Methylcellulose \*\*\*9004-62-0, Hydroxyethyl cellulose  
9004-67-5, Methyl cellulose  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(thermally-gelling drug delivery vehicles containing cellulose ethers)  
RN 9004-34-6 HCAPLUS  
CN Cellulose (8CI, 9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

RN 9004-59-5 HCAPLUS  
CN Cellulose, ethyl methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 67-56-1  
CMF C H4 O

H<sub>3</sub>C—OH

CM 3

CRN 64-17-5  
CMF C2 H6 O

H<sub>3</sub>C—CH<sub>2</sub>—OH

RN 9004-62-0 HCAPLUS  
CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 107-21-1  
CMF C2 H6 O2

HO-CH<sub>2</sub>-CH<sub>2</sub>-OH

RN 9004-67-5 HCAPLUS  
 CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)  
 CM 1  
 CRN 9004-34-6  
 CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2  
 CRN 67-56-1  
 CMF C H4 O

H<sub>3</sub>C-OH

L116 ANSWER 25 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1996:350257 HCAPLUS  
 DN 125:19002  
 ED Entered STN: 18 Jun 1996  
 TI Thermally-gelling **ophthalmic** drug delivery vehicles containing  
 cellulose ethers  
 IN Kabra, Bhagwati P.; Lang, John C.  
 PA Alcon Laboratories, Inc., USA  
 SO PCT Int. Appl., 30 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K009-00  
 ICS A61K047-38  
 CC 63-5 (Pharmaceuticals)  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9606597	A1	19960307	WO 1995-US10877	19950823 <--
	W: AU, CA, CN, JP, MX				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2172373	AA	19960307	CA 1995-2172373	19950823 <--
	CA 2172373	C	19990316		
	AU 9534965	A1	19960322	AU 1995-34965	19950823 <--
	AU 686455	B2	19980205		
	EP 725628	A1	19960814	EP 1995-931603	19950823 <--
	EP 725628	B1	20011107		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	CN 1134662	A	19961030	CN 1995-190826	19950823 <--
	JP 09508143	T2	19970819	JP 1995-508897	19950823 <--
	AT 208186	E	20011115	AT 1995-931603	19950823 <--
	ES 2162638	T3	20020101	ES 1995-931603	19950823 <--
	PT 725628	T	20020328	PT 1995-931603	19950823 <--
	TW 460288	B	20011021	TW 1995-84108938	19950828 <--
	HK 1012558	A1	20020222	HK 1998-113839	19981217 <--
PRAI	US 1994-298244	A	19940830	<--	
	WO 1995-US10877	W	19950823	<--	

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9606597	ICM	A61K009-00
	ICS	A61K047-38
WO 9606597	ECLA	A61K009/00M16; A61K047/38
AB	Drug delivery vehicles which reversibly increase in either loss modulus or storage modulus, or both, upon contact with the <b>eye</b> , skin, mucous membrane of body cavity are disclosed. The vehicles contain one or more nonionic substituted cellulose ethers and do not require a charged surfactant or a pH-sensitive polymer for such increase in loss modulus or storage modulus, or both, upon administration. In one embodiment, the vehicles gel upon instillation in the <b>eye</b> . A solution of 3% methylethyl cellulose was stirred in ice bath for 2 h to completely hydrate the polymer, then the solution was left at room temperature; the osmolality of this solution was .apprx.13 mOsm. The viscoelastic properties of the solution was measured at 25° for 30 min followed by a ramp from 25-35° at a rate of 1°/min and followed by an isotherm at 35° for 60 min. by dynamic mech. thermal analyzer. The storage modulus of this sample increased by more than 50 Pa by raising the temperature from 25 to 35°.	
ST	gelling <b>ophthalmic</b> drug vehicle cellulose ether	
IT	<b>Glaucoma (disease)</b> (inhibitors; thermally-gelling <b>ophthalmic</b> drug delivery vehicles containing cellulose ethers)	
IT	Allergy inhibitors Anion exchangers Anti-infective agents Antihypertensives Cation exchangers Gelation Immunosuppressants Inflammation inhibitors (thermally-gelling <b>ophthalmic</b> drug delivery vehicles containing cellulose ethers)	
IT	Animal growth regulators <b>Prostaglandins</b> Proteins, biological studies RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (thermally-gelling <b>ophthalmic</b> drug delivery vehicles containing cellulose ethers)	
IT	Neurotransmitter agonists (dopaminergic, thermally-gelling <b>ophthalmic</b> drug delivery vehicles containing cellulose ethers)	
IT	Pharmaceutical dosage forms ( <b>ophthalmic</b> , thermally-gelling <b>ophthalmic</b> drug delivery vehicles containing cellulose ethers)	
IT	9004-58-4, Ethylhydroxyethyl cellulose 9004-59-5, Methylethyl cellulose RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (thermally-gelling <b>ophthalmic</b> drug delivery vehicles containing cellulose ethers)	
IT	75345-27-6, Polyquad RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (thermally-gelling <b>ophthalmic</b> drug delivery vehicles containing cellulose ethers)	
IT	9004-34-6D, Cellulose, ethers RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (thermally-gelling <b>ophthalmic</b> drug delivery vehicles containing cellulose ethers)	

IT 9004-58-4, Ethylhydroxyethyl cellulose 9004-59-5,  
Methylethyl cellulose  
RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU  
(Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(thermally-gelling ophthalmic drug delivery vehicles containing  
cellulose ethers)  
RN 9004-58-4 HCAPLUS  
CN Cellulose, ethyl 2-hydroxyethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 107-21-1  
CMF C2 H6 O2

HO-CH<sub>2</sub>-CH<sub>2</sub>-OH

CM 3

CRN 64-17-5  
CMF C2 H6 O

H<sub>3</sub>C-CH<sub>2</sub>-OH

RN 9004-59-5 HCAPLUS  
CN Cellulose, ethyl methyl ether (8CI, 9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 67-56-1  
CMF C H4 O

H<sub>3</sub>C-OH

CM 3

CRN 64-17-5  
CMF C2 H6 O

H<sub>3</sub>C-CH<sub>2</sub>-OH

IT 9004-34-6D, Cellulose, ethers  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (thermally-gelling ophthalmic drug delivery vehicles containing  
 cellulose ethers)  
 RN 9004-34-6 HCAPLUS  
 CN Cellulose (8CI, 9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L116 ANSWER 26 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:528646 HCAPLUS  
 DN 122:274071  
 ED Entered STN: 06 May 1995  
 TI Bioadhesive emulsions for enhanced drug delivery  
 IN Friedman, Doron; Schwarz, Joseph; Amselem, Shimon  
 PA Pharmos Corp., USA  
 SO PCT Int. Appl., 53 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 IC ICM A61K009-107  
 CC 63-6 (Pharmaceuticals)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9505163	A1	19950223	WO 1994-US8803	19940805 <--
	W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JP, KE, KG, KR, KZ, LK, LT, LV, MD, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, TT, UA, UZ, VN				
	RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5744155	A	19980428	US 1993-106262	19930813 <--
	CA 2169357	AA	19950223	CA 1994-2169357	19940805 <--
	AU 9474511	A1	19950314	AU 1994-74511	19940805 <--
	AU 692460	B2	19980611		
	EP 714289	A1	19960605	EP 1994-924125	19940805 <--
	R: AT, BE, CH, DE, FR, GB, IE, IT, LI, LU				
	IL 110588	A1	20000601	IL 1994-110588	19940808 <--
	US 5993846	A	19991130	US 1998-63660	19980421 <--
PRAI	US 1993-106262	A	19930813	<--	
	WO 1994-US8803	W	19940805	<--	

# CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES	
WO 9505163	ICM	A61K009-107	
WO 9505163	ECLA	A61K009/00M16; A61K009/00M18D; A61K009/107D	<--
US 5744155	ECLA	A61K009/00M18D; A61K009/00M16; A61K009/107D	<--
US 5993846	ECLA	A61K009/00M18D; A61K009/00M16; A61K009/107D	<--

AB Novel compns. are provided for administering drugs. to mucosal surface using bioadhesive emulsions of the "lipid-water" type containing suitable drugs. Thus, a solution of Carbopol-940 0.250 g and glycerol 11.2 g in 420 mL water was mixed with an oil phase consisting of pilocarpine 10.5, medium-chain triglycerides 21.2, Lipoid E-75 3.75, and Miranol MHT 7.8 g. The mixture was further mixed with 50 mg thiomersal and 1.0 g chlorobutanol in 50 mL water.

ST bioadhesive emulsion drug delivery; polymer surfactant bioadhesive emulsion; Carbopol 940 triglyceride bioadhesive emulsion

IT Steroids, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (anabolic; bioadhesive emulsions for enhanced drug delivery)

IT Adrenergic antagonists  
 Analgesics  
 Anesthetics  
 Antibiotics  
 Anticonvulsants and Antiepileptics  
 Antidepressants  
 Anxiolytics  
 Cholinergic agonists  
 Cryoprotectants  
 Drug bioavailability  
 Eye  
 Fungicides and Fungistats  
 Inflammation inhibitors  
 Miotics  
 Mucous membrane  
 Neoplasm inhibitors  
 Surfactants  
 Virucides and Virustats  
 (bioadhesive emulsions for enhanced drug delivery)

IT Amino acids, biological studies  
 Cardiolipins  
 Estrogens  
 Glycerides, biological studies  
 Glycosaminoglycans, biological studies  
 Hormones  
 Lysophosphatidylcholines  
 Paraffin oils  
 Phosphatidic acids  
 Phosphatidylcholines, biological studies  
 Phosphatidylethanolamines  
 Phosphatidylglycerols  
 Phosphatidylinositols  
 Phosphatidylserines  
 Phospholipids, biological studies  
 Polymers, biological studies  
 Prostaglandins  
 Siloxanes and Silicones, biological studies  
 Vitamins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (bioadhesive emulsions for enhanced drug delivery)

IT Prostaglandins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (I, bioadhesive emulsions for enhanced drug delivery)

IT Lipoproteins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (apo-, bioadhesive emulsions for enhanced drug delivery)

IT Intestine  
 (colon, bioadhesive emulsions for enhanced drug delivery)

IT Lecithins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (egg yolk, bioadhesive emulsions for enhanced drug delivery)

IT Pharmaceutical dosage forms  
 (emulsions, bioadhesive emulsions for enhanced drug delivery)

IT Pharmaceutical dosage forms  
 (emulsions, topical, bioadhesive emulsions for enhanced drug delivery)

IT Fatty acids, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (esters, bioadhesive emulsions for enhanced drug delivery)

IT Castor oil  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (ethoxylated, bioadhesive emulsions for enhanced drug delivery)

IT Alcohols, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(fatty, bioadhesive emulsions for enhanced drug delivery)

IT Alcohols, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (fatty, ethoxylated, bioadhesive emulsions for enhanced drug delivery)

IT Tranquilizers and Neuroleptics  
 (major, bioadhesive emulsions for enhanced drug delivery)

IT Glycerides, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (mono-, bioadhesive emulsions for enhanced drug delivery)

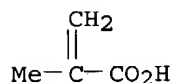
IT Peptides, biological studies  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (oligo-, bioadhesive emulsions for enhanced drug delivery)

IT 52-53-9, Verapamil 53-86-1, Indomethacin 54-71-7, Pilocarpine hydrochloride 57-88-5, Cholesterol, biological studies 79-41-4D, Methacrylic acid, derivs., polymers 92-13-7, Pilocarpine 151-21-3, Sodium dodecyl sulfate, biological studies 9000-36-6, Karaya gum 9000-65-1, Tragacanth gum 9000-69-5, Pectin 9003-01-4, Poly(acrylic acid) 9003-39-8, PVP 9004-32-4 9004-54-0, Dextran T-70, biological studies 9004-61-9, Hyaluronic acid 9004-99-3, Simulsol M53 9005-32-7, Alginic acid 9005-38-3, Sodium alginate 9005-49-6, Heparin, biological studies 9005-65-6, Tween 80 9011-16-9, Maleic anhydride-methyl vinyl ether copolymer 9012-76-4, Chitosan 9041-08-1, Fragmin 15307-86-5, Diclofenac 25301-02-4, Tyloxapol 25322-68-3D, PEG, fatty esters or alkyl Ph ethers 71463-34-8, Miranol MHT 76050-42-5, Carbopol 940  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (bioadhesive emulsions for enhanced drug delivery)

IT 79-41-4D, Methacrylic acid, derivs., polymers 9003-01-4, Poly(acrylic acid) 9004-32-4 9005-65-6, Tween 80  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (bioadhesive emulsions for enhanced drug delivery)

RN 79-41-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl- (9CI) (CA INDEX NAME)



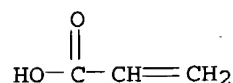
RN 9003-01-4 HCAPLUS

CN 2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7

CMF C3 H4 O2



RN 9004-32-4 HCAPLUS

CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

CM 1

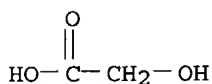
CRN 9004-34-6

CMF Unspecified

CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 79-14-1  
CMF C2 H4 O3RN 9005-65-6 HCAPLUS  
CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
(9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L116 ANSWER 27 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1993:610773 HCAPLUS

DN 119:210773

ED Entered STN: 13 Nov 1993

TI **Viscous ophthalmic pharmaceuticals**

containing cellulosic polymers and carboxy vinyl polymers

IN Ali, Yusuf; Bhagat, Haresh G.

PA Alcon Laboratories, Inc., USA

SO PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A61K009-08

ICS A61K047-38; A61K047-32

CC 63-6 (Pharmaceuticals)

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9317664	A1	19930916	WO 1993-US1565	19930222 <--
	W: AU, CA, JP				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9337287	A1	19931005	AU 1993-37287	19930222 <--
	US 5460834	A	19951024	US 1995-371043	19950110 <--
PRAI	US 1992-844269	A	19920302	<--	
	US 1991-807528	B1	19911213	<--	
	US 1992-994051	B2	19921216	<--	
	WO 1993-US1565	A	19930222	<--	
	US 1993-31058	B2	19930312	<--	
	US 1993-170482	B1	19931220	<--	

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

	PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
	WO 9317664	ICM	A61K009-08
		ICS	A61K047-38; A61K047-32
AB	<b>Viscous ophthalmic pharmaceuticals</b> contain a cellulosic polymer having an average mol. weight 10,000-13x10 <sup>6</sup> 0.05-5.0 and a carboxy vinyl polymer having an ave. mol. weight 500,000-6x10 <sup>6</sup> 0.05-3.0%. An ophthalmic composition containing HPMC 0.5, and Carbomer 934P 0.2% had viscosity of 6830 cP.		
ST	<b>ophthalmic pharmaceutical carboxy vinyl polymer viscosity</b> ; cellulose deriv <b>ophthalmic pharmaceutical viscosity</b> ; HPMC Carbomer 934P <b>ophthalmic pharmaceutical viscosity</b>		
IT	Adrenergic agonists		



Allergy inhibitors  
 Anti-infective agents  
 Antihypertensives  
 Miotics  
   **Prostaglandins**  
 Retinoids  
 Steroids, biological studies  
 RL: BIOL (Biological study)  
   (**ophthalmic** pharmaceuticals containing cellulosic polymers and  
   carboxy vinyl polymers and, **viscous**)  
 IT Neurotransmitter antagonists  
   (dopaminergic, **ophthalmic** pharmaceuticals containing cellulosic  
   polymers and carboxy vinyl polymers and, **viscous**)  
 IT **Eye, disease**  
   (keratoconjunctivitis sicca, treatment of, with  
   **ophthalmic** pharmaceuticals containing cellulosic polymers and  
   carboxy vinyl polymers)  
 IT Pharmaceutical dosage forms  
   (**ophthalmic, viscous, cellulosic** polymers and  
   carboxy vinyl polymers in)  
 IT Adrenergic antagonists  
   ( $\beta$ -, **ophthalmic** pharmaceuticals containing cellulosic  
   polymers and carboxy vinyl polymers and, **viscous**)  
 IT 9000-81-1, Acetylcholinesterase 9001-03-0, Carbonic anhydrase  
 9028-31-3, Aldose reductase  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
   (inhibitors, **ophthalmic** pharmaceuticals containing cellulosic  
   polymers and carboxy vinyl polymers and, **viscous**)  
 IT 9004-62-0, Hydroxyethyl cellulose 9004-64-2,  
 Hydroxypropyl cellulose 9004-65-3 9004-67-5, Methyl  
 cellulose  
 RL: BIOL (Biological study)  
   (**ophthalmic** pharmaceuticals containing carboxy vinyl polymers  
   and, **viscous**)  
 IT 50-02-2, Dexamethasone 51-43-4, Epinephrine 51-83-2, Carbachol  
 53-02-1, Tetrahydrocortisol 56-81-5, 1,2,3-Propanetriol,  
 biological studies 59-66-5, Acetazolamide 92-13-7, Pilocarpine  
 452-35-7, Ethoxzolamide 554-57-4, Methazolamide 7733-02-0, Zinc  
 sulfate 9002-89-5, Poly(vinyl alcohol) 9003-39-8, PVP  
 9004-54-0, Dextran 70, biological studies 12441-09-7D, Sorbitan, derivs.  
 25322-68-3 26839-75-8, Timolol 40828-46-4, Suprofen 47141-42-4,  
 Levobunolol 49697-38-3, Rimexolone 56298-24-9, Dipivalylepinephrine  
 63659-18-7, Betaxolol 66711-21-5 74103-06-3, Ketorolac 85721-33-1,  
 Ciprofloxacin  
 RL: BIOL (Biological study)  
   (**ophthalmic** pharmaceuticals containing cellulosic polymers and  
   carboxy vinyl polymers and, **viscous**)  
 IT 57916-92-4, Carbomer 934p 76050-42-5, Carbomer 940 91315-32-1,  
 Carbomer 910 96827-24-6, Carbomer 1342  
 RL: BIOL (Biological study)  
   (**ophthalmic** pharmaceuticals containing cellulosic polymers and,  
   **viscous**)  
 IT 9004-62-0, Hydroxyethyl cellulose 9004-64-2,  
 Hydroxypropyl cellulose 9004-65-3 9004-67-5, Methyl  
 cellulose  
 RL: BIOL (Biological study)  
   (**ophthalmic** pharmaceuticals containing carboxy vinyl polymers  
   and, **viscous**)  
 RN 9004-62-0 HCAPLUS  
 CN Cellulose, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 107-21-1  
CMF C2 H6 O2

HO-CH<sub>2</sub>-CH<sub>2</sub>-OH

RN 9004-64-2 HCAPLUS  
CN Cellulose, 2-hydroxypropyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 57-55-6  
CMF C3 H8 O2

OH  
|  
H<sub>3</sub>C-CH-CH<sub>2</sub>-OH

RN 9004-65-3 HCAPLUS  
CN Cellulose, 2-hydroxypropyl methyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

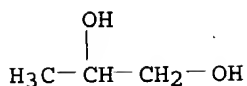
CM 2

CRN 67-56-1  
CMF C H4 O

H<sub>3</sub>C-OH

CM 3

CRN 57-55-6  
CMF C3 H8 O2



RN 9004-67-5 HCAPLUS  
 CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)

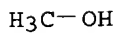
CM 1

CRN 9004-34-6  
 CMF Unspecified  
 CCI PMS, MAN

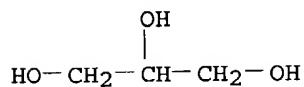
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CM 2

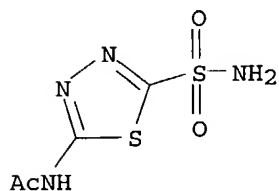
CRN 67-56-1  
 CMF C H4 O



IT 56-81-5, 1,2,3-Propanetriol, biological studies 59-66-5,  
 Acetazolamide 9002-89-5, Poly(vinyl alcohol)  
 RL: BIOL (Biological study)  
 (ophthalmic pharmaceuticals containing cellulosic polymers and  
 carboxy vinyl polymers and, viscous)  
 RN 56-81-5 HCAPLUS  
 CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



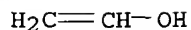
RN 59-66-5 HCAPLUS  
 CN Acetamide, N-[5-(aminosulfonyl)-1,3,4-thiadiazol-2-yl]- (9CI) (CA INDEX NAME)



RN 9002-89-5 HCAPLUS  
 CN Ethenol, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 557-75-5  
 CMF C2 H4 O



L116 ANSWER 28 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1992:221564 HCAPLUS  
 DN 116:221564  
 ED Entered STN: 31 May 1992  
 TI Treatment of ocular hypertension with 15-ketoprostaglandin derivative  
 IN Ueno, Ryuji  
 PA Kabushiki Kaisha Ueno Seiyaku Oyo Kenkyusho, Japan  
 SO Eur. Pat. Appl., 18 pp.  
 CODEN: EPXXDW  
 DT Patent  
 LA English  
 IC ICM A61K031-557  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 26  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 458588	A1	19911127	EP 1991-304574	19910521 <--
	EP 458588	B1	19941130		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	CA 2042972	AA	19911123	CA 1991-2042972	19910521 <--
	CA 2042972	C	19961015		
	US 5208256	A	19930504	US 1991-703660	19910521 <--
	ES 2067864	T3	19950401	ES 1991-304574	19910521 <--
	JP 04253910	A2	19920909	JP 1991-147792	19910522 <--
	JP 07098751	B4	19951025		
PRAI	JP 1990-132909		19900522	<--	

## CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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EP 458588	ICM	A61K031-557
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OS MARPAT 116:221564

AB Synergistic drugs for the treatment of ocular hypertension comprise a 13,14-dihydro-15-ketoprostaglandin derivative and an ethoxylated sorbitan unsatd. fatty acid monoester. Eye drops comprised 13,14-dihydro-15-keto-20-ethyl-PGF<sub>2</sub>α iso-Pr ester (I) 0.05, polysorbate-80 0.4, NaCl 0.8 g and water to 100 mL. The drugs (50 μL), applied to rabbit eye, decreased the ocular pressure, with only moderate side effects. The preparation of I is given.

ST eye antihypertensive prostaglandin sorbitan ester

IT Glaucoma (disease)

(treatment of, by synergistic compns. containing ketoprostaglandin derivative

and ethoxylated sorbitan esters)

IT 138829-60-4

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (Collins oxidation of)

IT 107-21-1, Ethylene glycol, biological studies

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (cyclization by, of oxodecylbicyclooctane derivative)

IT 75-30-9, Isopropyl iodide

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (esterification by, of prostaglandin derivative)

IT 138665-26-6 141197-13-9

RL: BIOL (Biological study)  
 (ocular antihypertensive, synergistic)

IT 9005-65-6D, mixts. with prostaglandin derivs. 138923-19-0D  
 , mixts. with ethoxylated sorbitan fatty acid monoesters

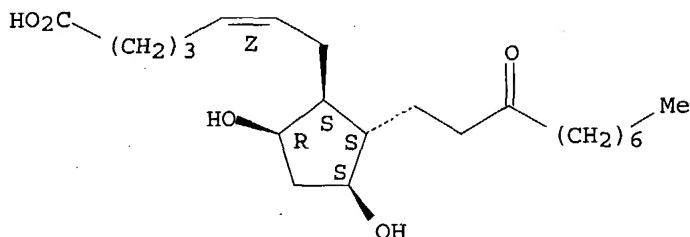
- RL: BIOL (Biological study)  
(ocular antihypertensives, synergistic)
- IT 138829-67-1P 138829-69-3P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and Jones oxidation of)
- IT 138829-63-7P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and cyclization of, with ethylene glycol)
- IT 120373-42-4P  
RL: RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(preparation and esterification of, with iso-Pr bromide)
- IT 138829-62-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and hydrogenation of)
- IT 138829-64-8P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and hydrolysis of)
- IT 120373-65-1P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction of, in preparation of prostaglandin derivative as  
ocular antihypertensive)
- IT 138829-61-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction of, with di-Me oxononylphosphonate)
- IT 138829-65-9P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reaction of, with tert-butyldimethylsilyl chloride)
- IT 138876-60-5P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and reduction of)
- IT 138829-72-8P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and ring opening of)
- IT 138829-66-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation and tosylation of)
- IT 138829-68-2P 138829-71-7P  
RL: PREP (Preparation)  
(preparation of, as ocular antihypertensive agent)
- IT 17814-85-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, in preparation of ocular antihypertensive  
prostaglandin derivative)
- IT 37497-25-9, Dimethyl (2-oxononyl)phosphonate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with bicyclooctane derivative)
- IT 18162-48-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(reaction of, with prostaglandin derivative)
- IT 9005-65-6D, mixts. with prostaglandin derivs. 138923-19-0D  
, mixts. with ethoxylated sorbitan fatty acid monoesters  
RL: BIOL (Biological study)  
(ocular antihypertensives, synergistic)

RN 9005-65-6 HCAPLUS  
 CN Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs.  
 (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

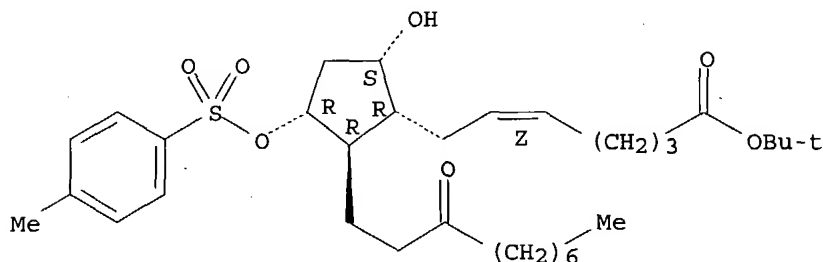
RN 138923-19-0 HCAPLUS  
 CN 5-Heptenoic acid, 7-[(1R,2R,3R,5S)-3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, (5Z)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.  
 Double bond geometry as shown.



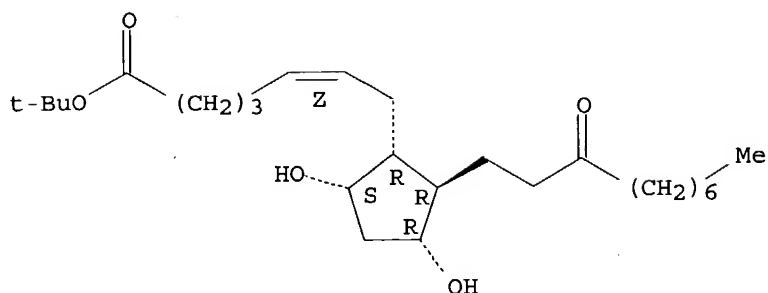
IT 138829-67-1P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and Jones oxidation of)  
 RN 138829-67-1 HCAPLUS  
 CN 5-Heptenoic acid, 7-[5-hydroxy-3-[[[4-methylphenyl)sulfonyl]oxy]-2-(3-oxodecyl)cyclopentyl]-, 1,1-dimethylethyl ester, [1R-[1α(Z),2β,3α,5α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



IT 138829-66-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and tosylation of)  
 RN 138829-66-0 HCAPLUS  
 CN 5-Heptenoic acid, 7-[3,5-dihydroxy-2-(3-oxodecyl)cyclopentyl]-, 1,1-dimethylethyl ester, [1R-[1α(Z),2β,3α,5α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



IT 138829-68-2P 138829-71-7P

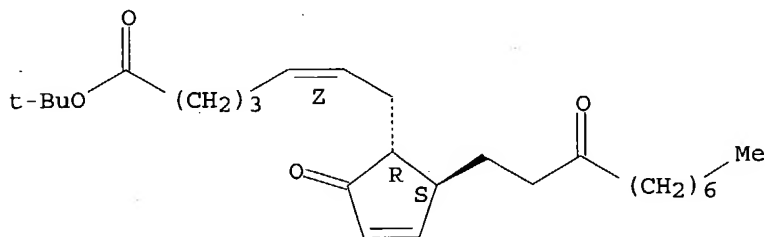
RL: PREP (Preparation)

(preparation of, as ocular antihypertensive agent)

RN 138829-68-2 HCAPLUS

CN 5-Heptenoic acid, 7-[2-oxo-5-(3-oxodecyl)-3-cyclopenten-1-yl]-, 1,1-dimethylethyl ester, [1R-[1α(Z),5β]]- (9CI) (CA INDEX NAME)

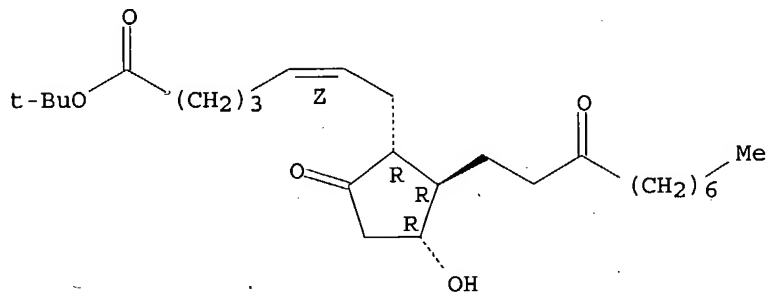
Absolute stereochemistry.  
Double bond geometry as shown.



RN 138829-71-7 HCAPLUS

CN 5-Heptenoic acid, 7-[3-hydroxy-5-oxo-2-(3-oxodecyl)cyclopentyl]-, 1,1-dimethylethyl ester, [1R-[1α(Z),2β,3α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.



L116 ANSWER 29 OF 29 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1990:191885 HCAPLUS

DN 112:191885

ED Entered STN: 26 May 1990

TI The effect of viscoelastic materials on rabbit blood-aqueous

barrier  
AU Machi, Naoko  
CS Sch. Med., Jikei Univ., Tokyo, Japan  
SO Tokyo Jikeikai Ika Daigaku Zasshi (1989), 104(5), 885-91  
CODEN: TJIDAH; ISSN: 0375-9172  
DT Journal  
LA Japanese  
CC 1-12 (Pharmacology)  
AB The effects of Na hyaluronate (I) and methy cellulose (II) on the protein and prostaglandin content in the anterior chamber of the yee were studied in rabbits. Samples of the aqueous humor were withdrawn 6, 12, and 48 h and 7 days after the injection of I and II. Six hours after injection, I had increased the protein level to .apprx.1.5 times that of controls, and II increased it 2.4 times more than I. The prostaglandin levels showed no consistent effect. It is suggested that II induced a greater breakdown of the blood-aqueous barrier than did I.  
ST blood aq human barrier hyaluronate cellulose  
IT **Prostaglandins**  
Proteins, biological studies  
RL: BIOL (Biological study)  
(of eye aqueous humor, hyaluronate and Me cellulose effect on)  
IT Blood  
(-aqueous humor barrier, hyaluronate and Me cellulose effect on)  
IT **Eye**  
(aqueous humor, -blood barrier, hyaluronate and Me cellulose effect on)  
IT 9004-61-9, Hyaluronic acid 9004-67-5, Methyl cellulose  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(blood-aqueous humor barrier response to)  
IT 9004-67-5, Methyl cellulose  
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)  
(blood-aqueous humor barrier response to)  
RN 9004-67-5 HCAPLUS  
CN Cellulose, methyl ether (8CI, 9CI) (CA INDEX NAME)  
  
CM 1  
  
CRN 9004-34-6  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 67-56-1  
CMF C H4 O

H<sub>3</sub>C-OH

=>

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